

HISTORIC
TEXTILE
FABRICS



R·GLAZIER



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HISTORIC
TEXTILE FABRICS

Frontispiece.



FLOWERED FRENCH
SILK BROCADE.

Second half of XVIII Century.

HISTORIC TEXTILE FABRICS

A SHORT HISTORY OF THE TRADITION
AND DEVELOPMENT OF PATTERN IN
WOVEN & PRINTED STUFFS

BY

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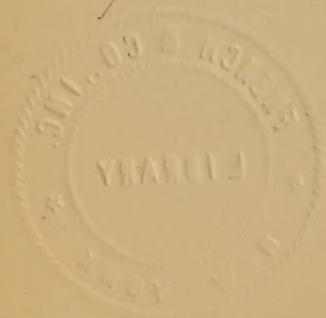
AUTHOR OF "A MANUAL OF HISTORIC ORNAMENT"

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PREFACE

THE purpose of this manual is to give a short, but, nevertheless, a comprehensive history of figured weaving; tracing its development through what is termed the *characteristics* or *styles* of certain periods, communities, or countries, and thus enabling those readers who are interested in woven or printed patterned fabrics to understand readily and to appreciate the magnificent inheritance of beautiful and useful examples of the weaver's craft that now lie available for reference and inspiration to those who desire to know what has been done in the past, and what may be done in the future.

To the designer, the salesman, the student, and also the general reader, the study of ancient, medieval, and Renaissance fabrics, with their delightful imagery, variety and beauty of form, texture, and colour, correlated as they are with the social and industrial life of the present day, should prove interesting, instructive, and stimulating, as the possibilities of the craft for usefulness or richness of material, together with suggestiveness and beauty of pattern, are understood and appreciated.

Advantage has been taken to secure representative examples of textile design from the splendid collections of historic fabrics in the Victoria and Albert Museum, and also from the smaller yet choice Manchester Collections, both of which are freely accessible to all who are interested in the subject.

The Author's thanks are due to Mr. Herbert Batsford for his experienced co-operation, and also for his valuable help in securing many hitherto unpublished photographs of fabrics included among the illustrations of this manual.

RICHARD GLAZIER

MANCHESTER

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NOTE

THE publication of Mr. Glazier's book has been held over owing to the death of the Author and various unfavourable conditions.

In view of the revived interest in Textile Design it seemed advisable to increase the scope and comprehensiveness of the book by adding considerably to the number of the photographic plates, especially in regard to such styles as Coptic and Chinese, and the period of the later 18th and early 19th centuries. The endeavour has been, while keeping the book moderate in size, to include a further selection of Textile Patterns which should increase its usefulness for reference, and enable it to be studied as a brief but, it is hoped, not altogether inadequate survey of the evolution and changes of Design, woven and printed.

At the present time the text has been extended by the inclusion of further notes and particulars, chiefly on the Historical side, and grateful acknowledgment is due to the Authorities who have helped by advice and suggestions, by reading the proofs and correcting the text. At the same time additional details have been inserted in regard to the colours and provenance of the stuffs illustrated.

THE PUBLISHER

March 1923

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HISTORIC TEXTILE FABRICS

I

INTRODUCTION

ANCIENT and Medieval history are intermingled with many arts, of which few are so indissolubly associated with the industrial, civic, and religious life of the people, as that of weaving.

This is doubtless due to the wide distribution of suitable materials and the universal need and desire for useful or sumptuous clothing, hence, contemporaneously with the production of plain linen and cotton cloths, were produced the delicate "woven air" of Mosul, the splendid woollen patterned shawls of Cashmere, the rich silken brocades and velvets of Florence, and the costly cloths of gold of Bagdad.

Many interesting and instructive descriptions are given by the Ancient and Medieval writers of the beauty, sumptuousness, and the significance of contemporaneous patterned fabrics—Homer, Ovid, Euripides, and Virgil describe the earlier, and Chaucer the medieval examples.

That these descriptions were something more than mere word painting is proved by the remains of such figured fabrics as are now treasured in our National Museums.

The written records of the craft of weaving are also largely associated with certain centres, cities, or communities, each having some distinctive mode of production, use of materials, or type of pattern, which must have added considerably to the importance of the community and its commercial prosperity.

The ornamentation of woven fabrics is so universal and so varied in methods of production, that some restriction is necessary in order to cover within the pages of a small manual any adequate description of the development of pattern; it is therefore thought desirable to exclude Carpets, Embroideries, and Tapestries (with the exception

CLASSIFICATION OF TYPES

of the primitive fabrics of Egypt and Peru which merit inclusion for their historic importance and interest) as beyond the scope of the present inquiry, and to treat only of the smaller patterned fabrics, such as Brocades and Damasks; a chapter on Printed, Dyed, and Stencilled Fabrics is also given.

In the consideration of patterned fabrics, the classification into specific periods or types, each with their characteristics of design, rather than a classification according to materials or technique of weaving, is undoubtedly the most convenient and instructive to the craftsman and the general reader; and further, patterned fabrics may be broadly divided into woven and printed patterns, each of which is in this manual treated separately.

Ancient and Medieval patterned fabrics are clearly differentiated by marked characteristics corresponding to racial and religious customs, yet there is no doubt that woven fabrics, more than any other of the products of the industrial arts, were largely influenced by the persistency of Eastern tradition of material and design due to the migratory habits of the weavers.

This is shown by the marked similarity of the early Sicilian fabrics to the Lucchese examples of the 14th century (plate 1), and undoubtedly due to the importation of many skilled Sicilian weavers into Lucca.

It is perhaps singular that the Eastern tradition of significant and sumptuous fabrics, with their distinctive patterning, should have so largely influenced European textiles during the 15th and 16th centuries, especially in Italy, where the Acanthus was such a dominant feature of the painted and relief ornament of the Renaissance; yet at this period, and even later, the magnificent velvets and brocades, the product of the Florentine, Venetian, and Genoese looms, were richly patterned with variants of the Eastern Artichoke and Pomegranate (plates 2, 38-41).

Some knowledge of the technique of weaving is requisite to those who desire to understand the structure of the fabric, with its possibilities and its limitations for the production of pattern; the reader is therefore referred for further information upon the science of weaving to such technical manuals as are given in the Appendix. The reader is also referred for a fuller and more comprehensive knowledge of the subject to the list of books and portfolios of patterned fabrics given in the Appendix.

A short chapter upon the Elements of Weaving, with a descriptive note upon the loom and its history, together with one on the technique of the printed fabric, will no doubt prove interesting and instructive to the general reader.



LUCCHESI BROCADE SILK.

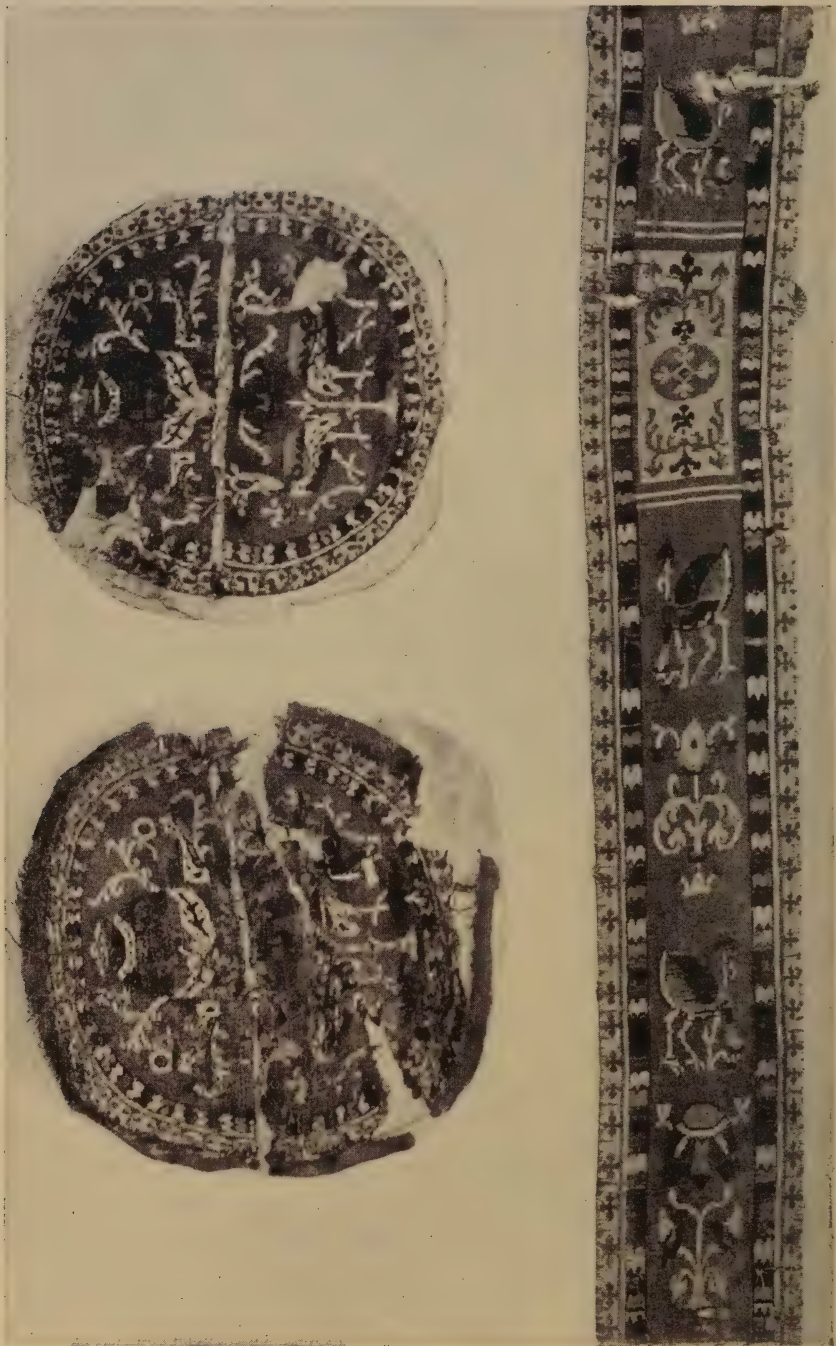
Early XIV Century.

From the Treasury of St. Mary's Church, Dantzig. • Design in gold
on a brown background.

Dr. Bock alludes to this design as one of the finest compositions of the N. Italian weavers
during the last period of their industry.



FLORENTINE BROCADED SILK DAMASK. *Late XV Century.*
Rose and pomegranate design woven in gold on white silk.



COPTIC TAPESTRY.

VI Century.

Shoulder bands and roundels, parts of a tunic made in Hither Asia or Alexandria, woven in coloured silk and wool on yellow linen.

II

MATERIALS USED BY THE WEAVER

LINEN.—The oldest existing fabrics have come from the tombs of Egypt, where, owing to the mode of burial and the dryness of the climate, they have remained in an excellent state of preservation.

These early fabrics are of linen, fine in texture and without pattern, and were produced extensively for native requirements, for clothing, and mummy wrappings, and to meet the large demand from other countries for these famous Egyptian linens.

Although woollen fabrics are but rarely found in the early tombs of Egypt, they were doubtless used extensively for clothing; the following passages give some explanation why woollen textiles are not found with the linen ones.

Herodotus says, "Egyptians wear a linen tunic fringed about their legs and called *calasure*, over which they wear a white woollen garment; nothing of woollen, however, is taken into the temple or buried with them, as their religion forbids it."

Apuleius says, "Wool, the excretion of a sluggish body taken from a sheep, was deemed a profane attire even in the times of Orpheus and Pythagora; but flax, that cleanest production of the field, is rightly used for the most inner clothing of man."

Some rare fragments of mixed linen and wool have been found in an early Egyptian tomb (see page 21). Numerous examples, however, of a later date have been found at Panopolis in Egypt. They are known as tapestry-woven fabrics, of linen and wool, and are of the Coptic period, A.D. 370–700 (plates 3, 8, and 9).

SILK.—This most beautiful of fibres was an early product of the East. Aristotle mentions the silkworm and relates, "that women unroll and separate the cocoons and afterwards weave them; and that silk was first woven in the Island of Cos by Pamphile, daughter of Plates."

MATERIALS USED BY THE WEAVER

Virgil speaks of, "how the Seres spin their fleecy forests in a slender twine."

Pliny, writing of the Chinese, says, "They have a pleasant, healthy climate, a clear atmosphere, gentle and favourable winds, in many places dusky woods (of mulberry trees) from which, working the fleecy product of the trees with frequent sprinklings of water, they comb off a very delicate and fine substance, a mixture of down and moisture, and, sprinkling the thread of it, they make silk, which was formerly used by nobles, but now by the lowest class, without distinction.

Dionysius Periegetes (A.D. 275-325) says, "The Seres (Chinese) make precious garments resembling in colour the flowers of the field, and rivalling in fineness the work of spiders."

Wrought silk was brought from Persia to Greece in B.C. 325. The Roman Emperor Heliogabalus in A.D. 220 first wore a garment of silk. In 780 Charlemagne sent Offa, King of Mercia, a present of two silken vests.

COTTON.—Cotton is also a product of the East. Pliny says, "The Seres are celebrated for a most delicate wool (cotton) which they collect from the trees in their own country and send to all parts of the world to be made into beautiful garments."

It was, however, in India and Central Asia that cotton fabrics, such as the famous muslins of Mosul, reached their highest development. The former country was the original home of the cultivation of cotton.

HEMP.—Hemp was also used in the production of ancient fabrics. Herodotus says, "Hemp grows in Scythia; it is very like flax, only it is a much taller and coarser plant.

"The Thracians make garments of it which closely resemble linen, so much so, indeed, that, if a person has never seen hemp, he is sure to think that they are of linen, and if he has, unless he is very experienced in such matters, he will not know of which material they are."

The Latin name, *Cannabis sativa*, of the hemp plant, has given the name of *canvas* to a woven hempen fabric.

GOLD AND SILVER.—Threads of gold and silver have been extensively used in the past, occasionally alone, but more usually in combination with silk and cotton threads, for the production of sumptuous fabrics.

The earliest description of the interweaving of gold and linen is given in the Book of Exodus :

"And he made the ephod of gold, blue and purple, and scarlet and fine twined linen, and they did beat the gold into thin plates and cut it into wires (strips) to work in the blue and the purple and the scarlet, and in the fine linen, with cunning work."

In medieval times the fabrics of India and China in the East,

THE MAKING OF CLOTH

and of Cyprus and Sicily in the West were frequently interwoven with gold and silver threads.

THE MAKING OF CLOTH.—As a fabric is formed by the interweaving of warp and weft threads, the durability, substance, texture, and pattern must necessarily depend upon the materials used and the mode of interweaving.

A plain fabric is formed by the interweaving, in regular sequence, of warp and weft threads of equal weight or thickness, as in plain *calico*; or by a thicker weft, which gives a ribbed appearance across the fabric, as in *poplin*; or by thicker or double warp threads forming *cords* down the length of the fabric; or by alternate thick and thin warp and weft, as in *repp*.

When additional weight, thickness, or closeness of material is desired, double cloth is made, which consists of two separate cloths, each having its own warp and weft, but interwoven to form one complete fabric.

Patterns may be formed either by the warp or the weft, or by both together. They may consist of simple geometrical repeats, with white linen warp and weft uniformly floated, now termed *diaper*; or be formed by differences of weaving rather than by contrasts of colour (*damask* weaving); or consist of short lengths of colour, which are put in by small additional shuttles, and allowed to float under the surface where not required (*brocade* weaving).

Pile fabrics, such as velvets, are produced by the weaving of silken warp threads under a ground weft and over a wire-weft rod, which is afterwards withdrawn, leaving a looped fabric, termed *terry*. If the loops are cut, the velvet is known as a "terry" velvet.

Velveteen is produced by "floating" loosely, over the warp threads, weft threads of cotton, which are then cut to form a pile. A *Brussels* carpet is produced by looping coloured woollen warp threads over wire rods in the same manner as "terry" velvet.

If the loops are cut to form a velvet surface, it is termed a *Wilton* carpet.

A *Brussels* carpet is woven 27 inches wide with, nominally, 260 loops or pile, in the width, but frequently with 256. The design thus covers 256 spaces on the point paper for each "pick" or horizontal line, while the length of the repeat varies to suit the pattern; $\frac{3}{4}$ of a yard is a common length, but larger patterns may be $1\frac{1}{2}$ yard long.

The figuring warp threads are arranged on separate spools in frames at the back of the loom, and according to the number of frames used it is styled 3, 4, or 5 framed carpet.

MEDIEVAL FABRICS

The manufacture of Brussels carpets was first introduced in 1750, at Wilton near Salisbury.

Tapestry carpets are produced in the same manner as a Brussels carpet, but the warp threads are printed with the required length of colour to form the pattern when looped over the pile wires. The number of pile loops is about the same as in a low class Brussels carpet, *i.e.* 216 to 225; the width is the same, and the length 27, 36, or 54 inches.

The pattern of a patent *Axminster* carpet is formed from *chenille* weft threads, which are triple threads interwoven with short strands of coloured wools which produce the pile; it has a beautiful soft surface, but owing to the mode of producing the *chenille* it is necessarily costly. A *Kidderminster* carpet is a double or triple cloth (two or three plies) woven together, the pattern being formed by the interchange of fabrics or the intermingling of colours. "*Oriental*" or true *Axminster* carpets are produced by interweaving with the strong vertical warp threads various coloured short woollen strands which form the pattern.

MEDIEVAL fabrics were known by various names for the different classes, in order to distinguish their material, texture, colour, or use, and most of these names have an Eastern origin.

The following are some of the principal classes:—

Holosericum, a fabric wholly of silk; *Subsericum*, partly of silk. *Exomitum*, or *Samit*, had a six-threaded silken warp, hence a costly fabric. Many church vestments, such as chasubles, dalmatics, and copes of the 12th, 13th, and 14th centuries, were of this rich material.

Chaucer, in his *Romaunt of the Rose*, describes the dress of "Mirth":

"Full yong he was, and merry of thought,
And in *Samette*, with birdes wrought,
And with gold beaten full fetously,
His bodie was clad full richely."

This passage not only indicates the richness of this fabric of silk and gold, but also its ornamentation of "birdes wrought"; probably it would be of Sicilian or Lucchese weaving.

Ciclatoun.—A thin, glossy, silken fabric, frequently with some threads of gold interspersed; used for vestments and for the dress of nobles. Chaucer, in his *Sire Thopas*, speaks of his "robe of ciclatoun."

Cendal, or *sandal*, and *taffeta* are thin silken fabrics used chiefly for linings. Chaucer says of his "Doctour of Phisike":

CLOTH OF GOLD

"In sanguin and in perse he clad was, alle
Lined with taffeta and with sendalle."

Sarcenet.—Since the 15th century, cendal has been described as *sarcenet*.

Satin is a glossy silken fabric, first mentioned in English inventories during the 14th century, and Chaucer speaks of it in his *Man of Law's Tale*:

"Clothes of gold and satins rich of hewe."

Camoca, or *camak*, is mentioned in the inventories of the 14th century, for church vestments and the draperies of beds of state. Edward the Black Prince bequeaths to his confessor "a large bed of red camoca." This material was probably of fine camels' hair and silk, made in Northern China (page 39).

Cloth of Tars, or *Tarsus*, is a similar fabric to camoca, but richer in colour, being a royal purple. Chaucer tells us of the "King of Inde" that "his cole armure was a cloth of Tars couched with perles."

Cloth of gold.—Gold had been used from remote times as a material for weaving, either alone, or interwoven with linen, silk, or cotton.

The Asiatic kings and nobles of the time of Alexander the Great wore robes splendid with gold and purple. Quintus Curtius, the historian, describes the dress worn by Darius thus: "The waist part of the royal purple tunic was woven in white, and upon his mantle of cloth of gold were figured two golden hawks, as if pecking at one another with their beaks."

Of its early use, without any other material for weaving, Pliny says, "Gold may be spun or woven like wool, without any wool being mixed with it."

Some indication is given of the sumptuousness of the apparel of Imperial Rome, in the record that Agrippina, the wife of the Emperor Claudius, wore a robe woven entirely of gold.

The wife of the Emperor Honorius died about A.D. 400, and in 1544 her grave was opened and the remains of the golden tissues, in which her body had been shrouded, were melted, and it amounted to thirty-six pounds of gold.

These early tissues of gold were undoubtedly the products of Asiatic looms, whilst at a later date they were woven in Cyprus, Sicily, Lucca, Venice, and Southern Germany.

There is no doubt that some narrow cloths of gold were woven upon the English looms of the 14th century, but the larger pieces of this material in use during this period were from the Cyprian or Lucchese looms.

BAUDEKINS

A record of the death of Anne, Queen of Richard II., states that the "Herec" was covered with cloth of gold, which was afterwards sold for £66.

Some indication of the use and cost of this sumptuous fabric during the reign of Henry VIII. may be gathered from the following item of the expenses of Princess Mary, in 1540: "Payed to Peycocke, of London, for xix yerds iii. qrt. of clothe of golde at xxxviij. s the yerde xxxviij^{li} x s. vj^d." And for "a yerde and d^t qrt. of clothe of siluer xl^s."

Mention is also made in the York fabric rolls of the time of Edward VI., "of two copes of sanguine purple clothe of goulde, and a redd vestment with lyons of goulde."

The gold and silver used in early Asiatic fabrics was in the form of strips of metal. In Sicilian, Cyprian, Italian, and German fabrics, the thin metal, either by itself, or upon thin skin, was wrapped round a silken or linen thread, while the Saracens in Spain used a strip of gilded parchment.

Fine gold wire was in use at an early date, for embroidery, but not for the woven fabric.

Baudekins (from Bagdad), a fine silken tinted shot cloth of gold, somewhat similar to "ciclatoun," was extensively used as cloths of estate, which were spread overhead or behind the thrones of kings.

The following passage indicates the amount of cloth necessary for such a purpose, and its value, during the reign of Henry VII.:—

"Item to Antony Corse for a cloth of estate conteyning 47½ yerds, £11 the yerd, £522, 10s."

These baudekins were also frequently used at this period for funeral palls, and known as cloths of pall.

Another material used extensively during the reign of Edward VI. was coloured velvet. In the York fabric rolls mention is made of "white velvet copes, together with a cope of greene velvet with flowers. Some Blew copes and Redd copes, and two tunicks of Redd Sarcinett."

Fustian.—Originally produced at Fustât (Cairo), in Egypt, is a fabric having a linen warp and a thick twilled cotton weft, which is cut on one side showing a low pile. In the 13th century St. Paul's Cathedral had a "white chasuble of fustian." Frequent mention is made during the 12th and 13th centuries of the fustian chasubles of the Cistercian abbots.

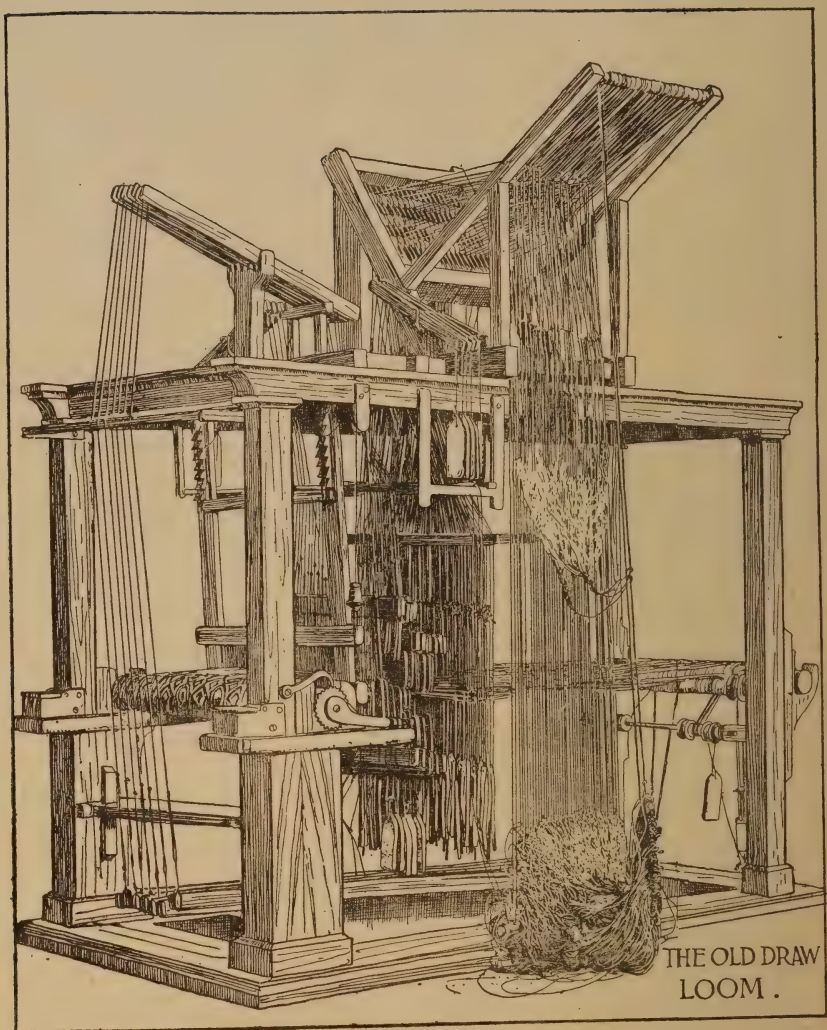
Diaper.—Originally a silken patterned fabric, usually white. In the early church inventories of Exeter (1161) there is mentioned, "a cope of white diaper with half moons"; and at St. Paul's

DIAPER

Cathedral, "a chasuble of white diaper with coupled parrots in places ; among branches, and a cope of a certain diaper of Antioch colour, covered with trees and diapered birds, of which the heads, breasts, and feet, as well as the flowers on the tree, were woven in gold thread."

There is no doubt that these specific fabrics were the products of the Sicilian looms.

Plate 4.



THE OLD DRAW
LOOM .

III

THE LOOM

THE loom is the apparatus upon which a woven fabric is produced. Its essential features are, the *warp* and *cloth* beams, placed and supported at each end of the frame work; the *comb* or *reed* through which the warp threads pass from the warp beam to the cloth beam; and the *healds* or the apparatus for lifting the warp threads to permit of the passage of the *shuttle* containing the weft thread.

A diagram explanatory of the elements of weaving is here given (fig. 1), showing the alternate warp threads being lifted by the *heald* to form the *shed* for the shuttle to pass through, after which the *reed* is beaten up against the weft to produce a firm structure; the process is repeated by the next *heald*, producing what is known as plain cloth.

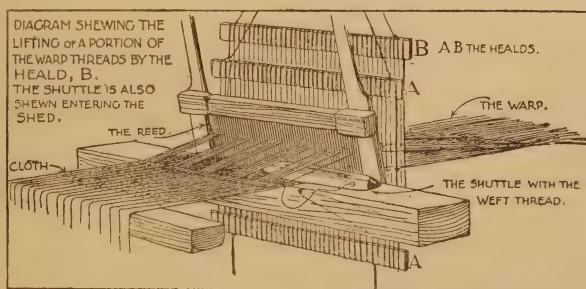
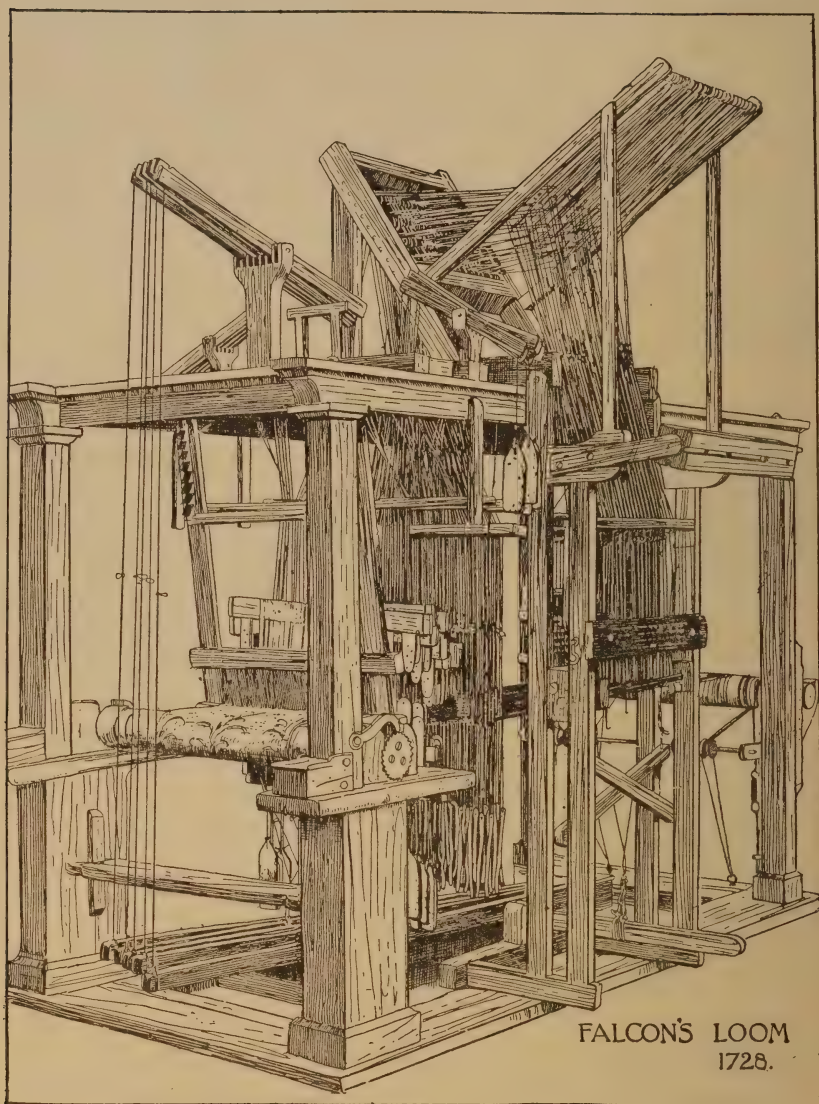


FIG. 1.—Diagram of the Principles of Weaving.

The illustration given in fig. 2 is an early Egyptian loom, taken from the original model in the Lyons Museum, and is probably the type of loom that was in general use before the introduction of patterned fabrics. Fig. 3 is taken from a painting in the tomb of Beni Hassan, B.C. 2500, and it shows the weavers working at the upright loom, as was customary in Egypt.

Fig. 4, from a 12th-century manuscript, is doubtless typical

Plate 5.



THE DRAW LOOM

of the Medieval European loom, having the warp threads stretched horizontally.

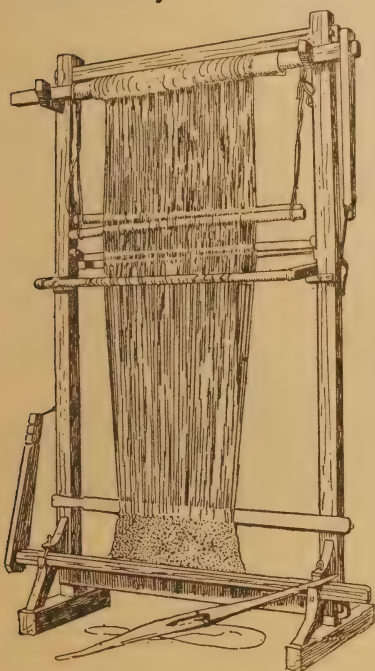


FIG. 2.—Early Egyptian Loom.

The draw loom was the earliest type for elaborate figured weavings, and it is still in use in China. The draw-boy stands upon the top of the loom to draw up the warp threads as required.

The draw loom was in use in Europe until 1604, when M. Simplot, a Frenchman, introduced

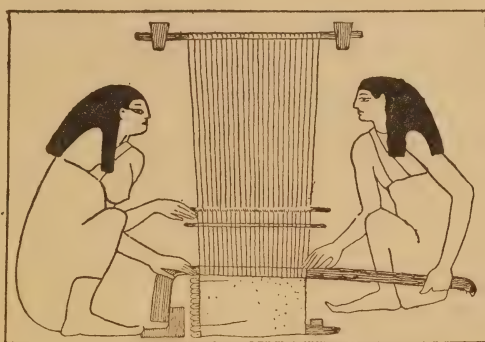


FIG. 3.—Early Egyptian Loom.

a series of cords called *simples*, so that a boy could work at the side of the loom (plate 4).

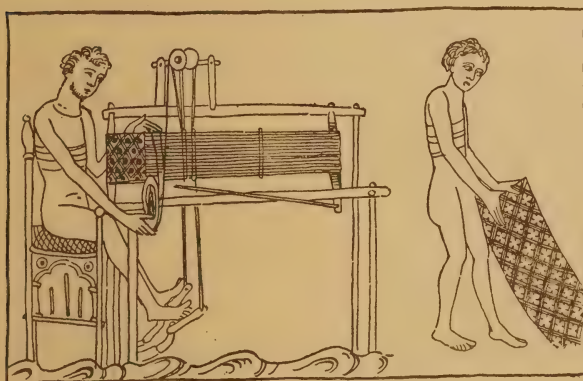
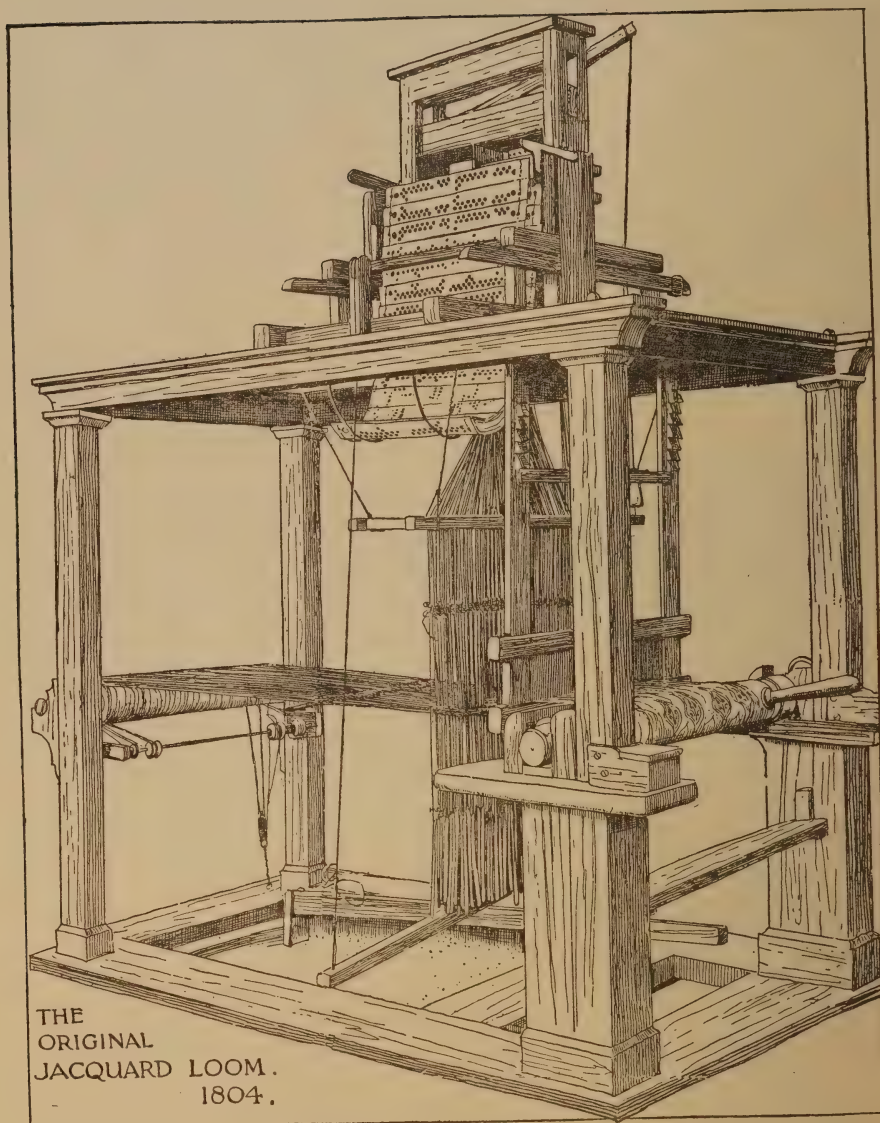


FIG. 4.—Early English Loom.

In 1687 Mason invented a draw-boy loom, by “which the weaver may perform the whole worke of weavingsuch stuffe, as the greatest weaving trade in Norwich doth now depend upon without the aid of a draught.” The remarkable invention

of perforated paper or cards for facilitating the weaving of figured fabrics was introduced by Bouchon (1725), and was continued by



THE
ORIGINAL
JACQUARD LOOM.
1804.

THE JACQUARD LOOM

Falcon in 1728, (plate 5), by Vaucanson in 1746, and perfected by Joseph Marie Jacquard in 1800-1804.

Plate 6 is from the original Jacquard loom now in the Lyons Museum; and to show the simplification effected by M. Jacquard in the lifting of the warp threads, a drawing is given of the earlier loom (plate 4), with its multiplicity of tail cords.

Plates 4, 5, and 6 are taken from the original models made by M. Marin in 1855, which are now in the Manchester



FIG. 5.—Chinese Silk Loom.

School of Technology. The original looms are in the Lyons Museum.

An explanatory drawing of the Jacquard movement for the weaving of patterned fabrics is given on plate 7. Two interesting examples of Chinese looms are given here—fig. 5,

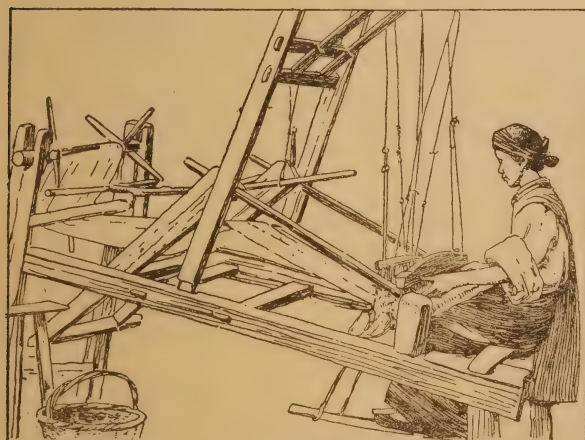
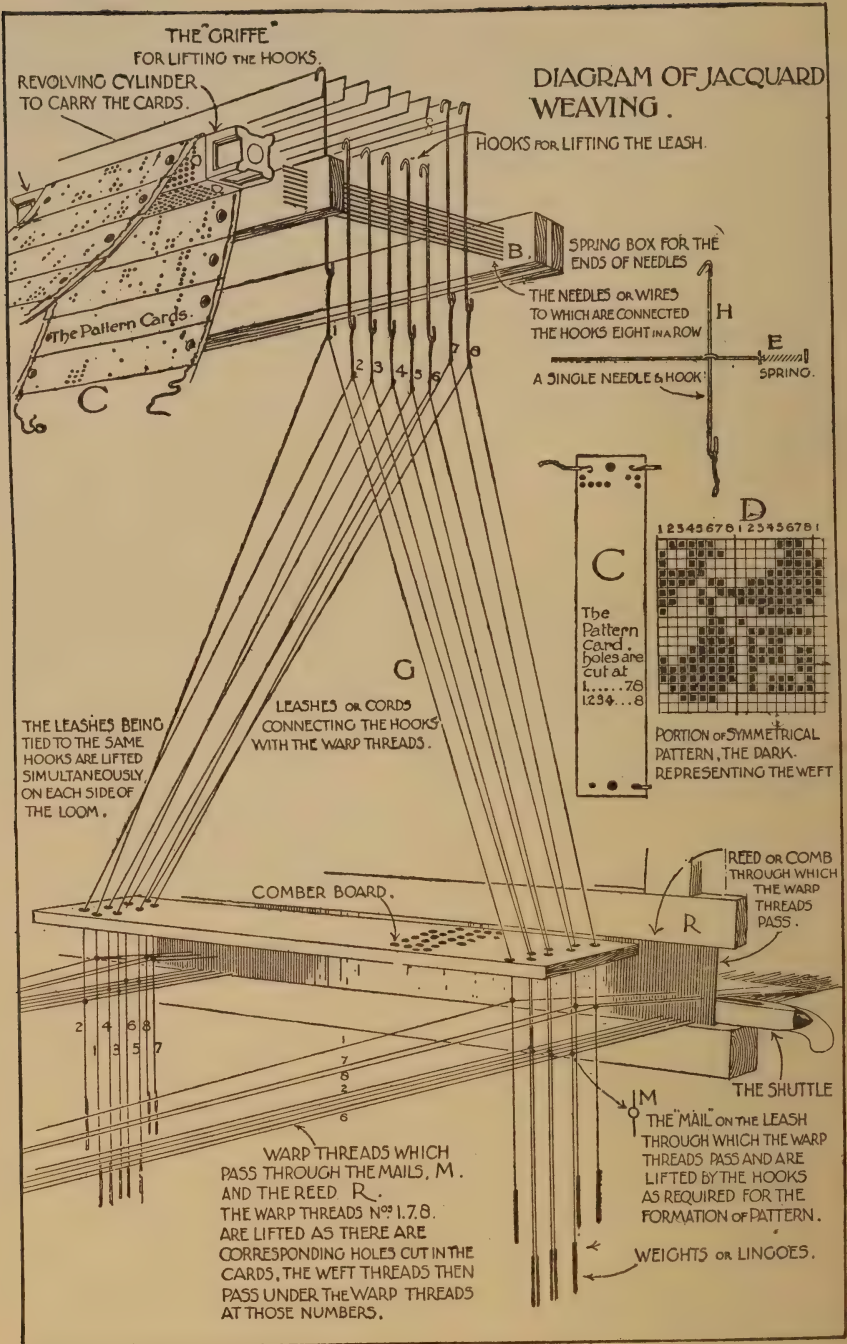


FIG. 6.—Chinese Cotton Loom.

a 17th-century silk loom; and fig. 6, a modern loom weaving plain cloth.



IV

THE EVOLUTION OF PATTERN

PATTERN undoubtedly arose from a desire, or necessity, for some symbol or emblem, significant of power, life, or association.

This significance is a characteristic feature of all ancient and medieval art; hence in the earliest of woven fabrics, a symbol is invariably the motive of the pattern. Many examples may be cited, such as the lotus and tree of life of Egypt and Assyria, the palm, pomegranate, and pine of India and Persia, the Scandinavian and the Chinese dragon, and the heraldic symbols of medieval Europe; some of which still remain an essential part of fabric patterning.

Apart from the significance of the symbol, two principles of ornament, symmetry and repetition, have played an important part in the formation of pattern. The symmetrical placing of figures,

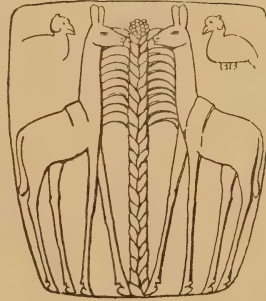


FIG. 7.—Slate relief, Early Egyptian.



FIG. 8.—Assyrian relief.

animals, and birds, with a central tree or plant, is of such frequent occurrence in ancient and medieval art, that it suggests some significance, rather than a merely technical or artistic consideration in the formation of pattern.

In the weaving of rich figured fabrics, symmetry has an economic value, as in such patterns corresponding warp threads may be lifted simultaneously by one movement of the loom (plate 7); but this

THE EVOLUTION OF PATTERN

symmetry is seen on the beautiful slate relief, B.C. 5500 (fig. 7), illustrated in *The Arts and Crafts of Egypt*, by Flinders Petrie; in the alabaster slabs of ancient Assyria (fig. 8); in the marble pavements of S. Miniato and the Baptistry Florence, of the 10th century, and in the beautiful 16th century Persian pottery (fig. 9) where it was doubtless used primarily for its significance, and for its beauty and harmony of arrangement.



FIG. 9.

V

WOVEN PATTERNS

PATTERN AND ITS REPETITION.—It will be readily understood, that, owing to the structural necessities of the loom, the pattern should repeat in some ordered sequence; hence repetition has been always and still is an important factor in the successful production of woven fabrics.

The scale of the pattern is also a matter of considerable importance; the larger the pattern, and the greater the number of threads necessary to weave it, the more complex is the apparatus required to lift the requisite warp threads, therefore small patterns are usually more economical to produce.

In the Book of Exodus some indication is given of the type of pattern used, and its arrangement upon the fabrics woven for the Temple.

“And they made upon the hems of the robe pomegranates of blue, and purple, and scarlet, and twined linen. And they made bells of pure gold, and put the bells between the pomegranates upon the hem of the robe, round about between the pomegranates: a bell and a pomegranate, a bell and a pomegranate, round about the hem of the robe” (Ex. xxxix. 24–26).

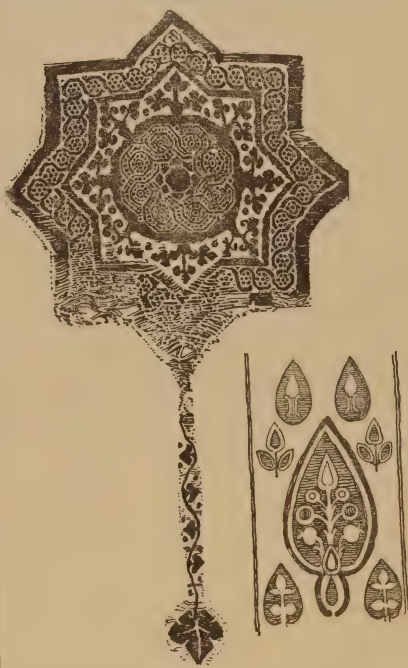
This description clearly indicates not only the units of the pattern, the coloured pomegranate and the golden bell, which were chosen for their significance, but also their arrangement. The mode of weaving is not described, but it was probably of the class called *Tapestry-weaving*, wholly formed by the weft, and is put in with the fingers, aided by a bobbin on a needle, the threads extending only to the limit of the required colours, instead of being carried from side to side of the web by means of shuttles, as in the case of ordinary weaving.



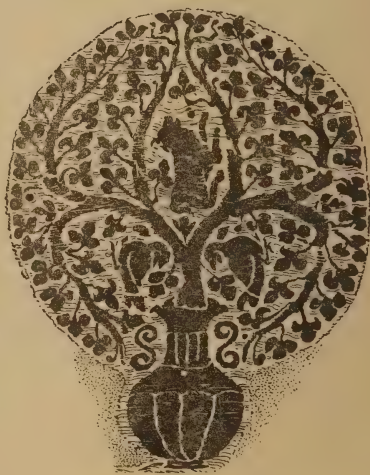
Graeco-Roman tapestry-woven panel.
III-IV Centuries



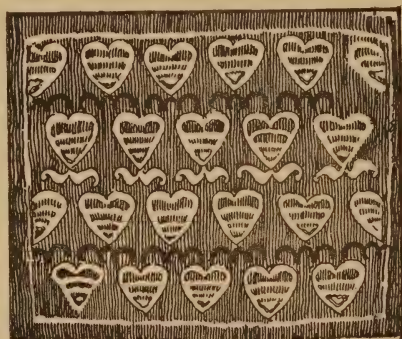
Ornament red, green, yellow, and
purple.



Purple wool ornament with white
embroidered outline.



Purple foliage, red flowers, and vase with
green ornament.



Purple ornament.

VI

EARLY TAPESTRIES

A few very early examples of these tapestry fabrics are in the Museum at Cairo, taken from the tomb of Thoutmôsis III., 18th dynasty (B.C. 1500-1400). These fabrics are of linen, the ornament consisting of lotus flowers and birds in red, blue, and green linen threads.

Some interesting illustrations of this period are to be found in *The Arts and Crafts of Ancient Egypt*, by Dr. Flinders Petrie.

Numerous examples, however, of a later date have been found in the Necropolis of Akhmîm, which marks the site of Panopolis, a city noted for its fine linen industry during the Coptic period in Egypt (A.D. 300-700).

The illustrations given on plate 8 are characteristic of these tapestries, and the patterning used during the first few centuries of our era. They undoubtedly evince a strong Græco-Roman influence in the detail and the arrangement of the pattern.

Although, as already explained, it is outside the province of this



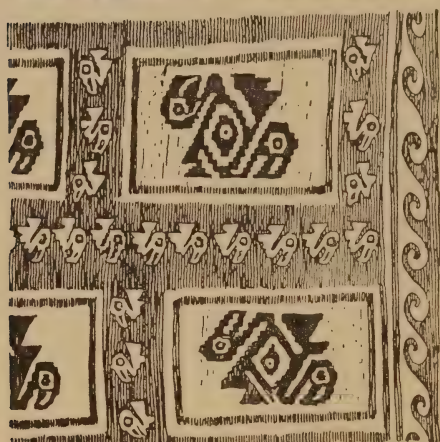
FIG. 10.—Peruvian Cloth.

PERUVIAN PATTERNS

book to deal generally with the development of tapestry weaving, the great importance of primitive tapestries in the history of textile design makes description and illustration of these early fabrics necessary.

In primitive days tapestry weaving was the only method of obtaining bright colours.

It is perhaps worthy of remark that a people so far removed from Egypt as the early Peruvians, should have produced tapestry fabrics identical in structure and material, differing only in the type of pattern, as there is an entire absence of the beautiful flora of Peru as elements of decoration; the patterns consisting of fishes, birds, and figures, together with the wave scroll, and the



DOUBLE CLOTH IN BROWN & YELLOW.

FIG. 11.—Peruvian Cloth.



FIG. 12.—Peruvian Tapestry.

fylfot or fret. Contemporary with these tapestry fabrics, many shuttle-woven double-cloths were also produced on the primitive Peruvian looms.

Figs. 10–12 are typical Peruvian patterns of a period not very remote from the arrival of Pizarro in 1529.

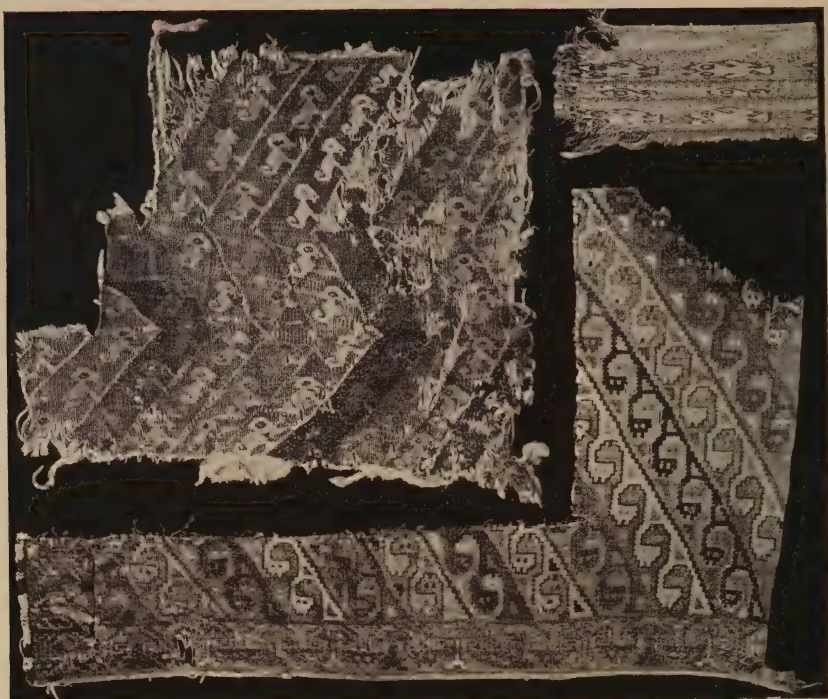
Most of the Peruvian textiles have been found in burying-grounds of the coastal region, and are the work of the non-Inca peoples, before and after the Inca conquests, which were completed only a little before the Spaniards landed; comparatively few are the work of the Incas themselves. The dates range over more than a thousand years.



COPTIC TAPESTRY.

Probably VI Century.

Front of a purple tunic, woven in coloured wools. Bright colours and crude ornament typical of decay of Græco-Roman tradition.



Relics of tapestry garments woven in coloured wools, date anterior to Spanish Conquest.



Cotton garment with tapestry woven pattern in coloured wools. Early pre-Inca.



Border of woven tapestry in yellow, black, and green wools.

PERUVIAN TAPESTRIES.

From Tombs near Lima.

VII

WOVEN FABRICS

GREEK FABRICS.—Many references are made by the early Greek writers to the sumptuous patterned fabrics used in the ritual of the temples or in the costume of the heroes.

Euripides speaks of Ion taking sacred tapestries out of the coffers:

“And these were the woven figures portrayed, Heaven was there collecting the stars within the Ether; and the Sun driving his horses, to the last waning light of day, and drawing with him shining Vesper; and black-robed Night driving her two-horsed chariot . . . and other weavings of barbarian workmanship.”

Such sumptuous fabrics were undoubtedly tapestry woven or embroidered, and were essentially sacred vestments.

The richly patterned fabrics described by Homer were probably from the Eastern looms, like the “other weavings of barbarian workmanship” of Euripides.

Homer in his *Odyssey*, describing the dress of Ulysses, says :



FROM A
GREEK
VASE BY
HIERON
400. B.C
BRITISH
MUSEUM.

FIG. 13.—Greek Fabrics.

“A robe of military purple flow’d
O’er all his frame, illustrious on his breast
The double clasping gold, the king confest.
In the rich woof a hound, mosaic drawn,
Bore on full stretch and seized a dappled fawn;
Deep in his neck his fangs indent their hold,
They pant and struggle in the moving gold.”

SASSANIAN FABRICS

This passage clearly indicates the use of animals as motives in patterning of early textile fabrics.

The simplicity and refinement of the Greek costume, with its multiplicity of vertical and radiating folds, did not permit of much rich patterning. Figs. 13-17 are therefore no doubt fairly representative of early Greek patterns, consisting of fret borders, with the ground perhaps slightly *semé* with rosettes or stars.

On some early vases, patterned costumes are shown having imbricated and trellis designs, which were probably produced by printing.

Greek art affected the art of both the Near and the Far East as a result of the reactions set up by the conquests of Alexander the Great. Remarkable examples of Chinese patterned weaving, apparently dating from the period of the Han dynasty (B.C. 206-A.D. 220), have recently been found by Sir Aurel Stein in the Tarim basin in Eastern Turkestan. It is under this dynasty that Greek influence begins to be felt in Chinese art.

SASSANIAN FABRICS

Of early extant patterned fabrics, woven with the shuttle, those silk stuffs frequently classed as Sassanian (though this would be a



FIG. 14.—Greek Costume.

disputable description of a good many of them), dating from about the 6th or 7th century A.D., are among the most interesting. The dynasty of the Sassanians was founded by Ardeshir in A.D. 226, after driving out the Parthians, who had ruled over the former lands of the dynasty founded by Cyrus for nearly five centuries. Now, for the first time since the days of the Achæmenians, Persia was governed by native rulers, and during a period of four centuries reached a high degree of achievement in the arts, especially that of weaving. The remarkable set of

figured silks, excavated some years ago on the site of Hadrian's city of Antinoë in Egypt, may have been woven within the borders of the new Persian empire, but this is by no means certain; their date is

THE FRIEZE OF ARCHERS

about the 6th century. This class of fabrics show a high degree of technical and artistic excellence. Numerous examples exist, some in an excellent

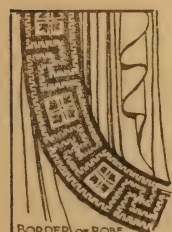


FIG. 15.

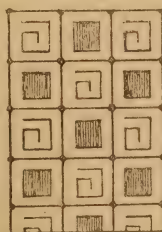


FIG. 16.

Greek Patterns.

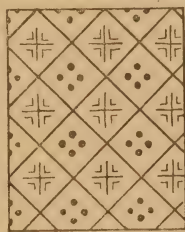


FIG. 17.

state of preservation, others fragmentary; yet all distinctive in patterning, consisting of a series of roundels, containing single or symmetrically placed figures or animals,

reminiscent of the costume patterning shown on the early Assyrian reliefs, and Chinese and Indian paintings.

The frieze of Archers from Susa (fig. 18) is an interesting example of an early costume enriched with a series of roundels.

The significance of this class of silks may be readily understood by noting the geographical position of the country which was in the direct line of communication between East and West; hence in these Sassanian woven fabrics, the influence of China and Persia may be seen, not only in the materials used, but also in the types of pattern and their significance.

Four examples are given on plate 11, sufficiently representative of the period or style. No. 2 is perhaps the earliest in date; No. 3

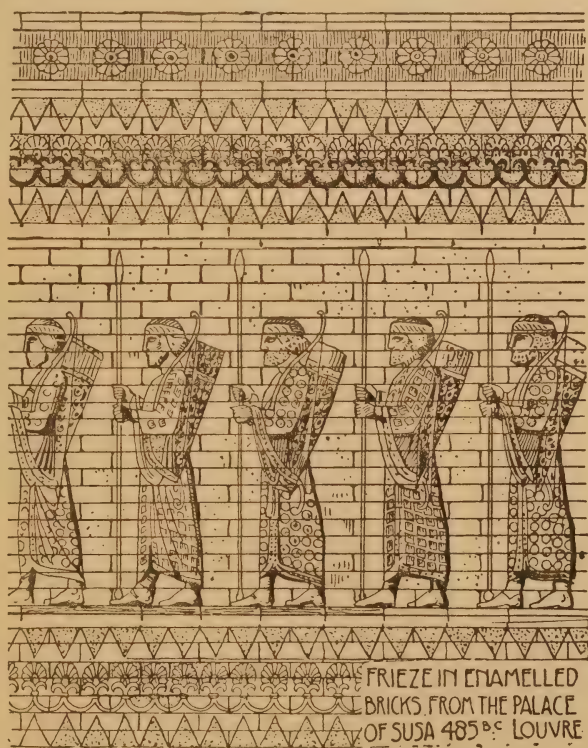


FIG. 18.—The Frieze of Archers, Susa.



1



2



3



4

SASSANIAN SILKS.

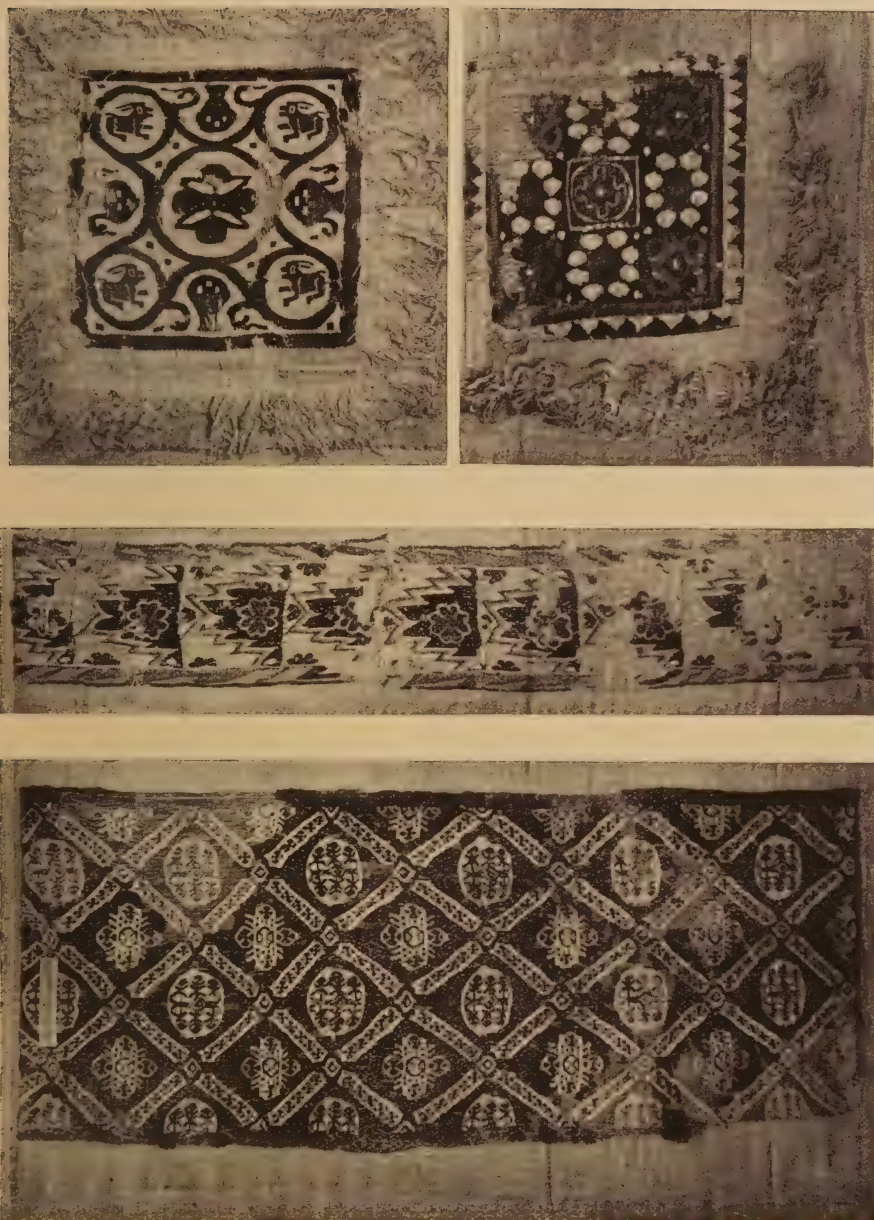
1. Has the name Kaikobad.

(In the Lyons Museum.)

3. Prob. woven in Hither Asia, VI-VII Cent. Roundels, red ground; horses, fawn; lions, light brown; ground, fawn.

2. Pattern in light yellow-green on dark green ground.

4. XII Cent.; raised pattern in red on green ground; parrots' heads and feet, gold.



COPTIC TAPESTRY FROM UPPER EGYPT. *V-VI Centuries.*

Upper : Panels in brown, red, and yellow on white background.

Centre : Band with flowers in blue on red with blue edging, on white ground.

Lower : Band woven in white on red background, the pattern in coloured wools and linen thread.



Woven in coloured, chiefly purple, wools, and undyed linen thread.
GRÆCO-ROMAN TAPESTRY.

IV-V Centuries.



Band of red silk, the figures and edging woven in gold and white silk.

FABRICS OF HITHER ASIA OR ALEXANDRIA.



Panel border design woven in red, green, and dark blue.

VI or VII Century.

ARRANGEMENT OF PATTERN

represents two Persian kings on horseback, hunting lions, within the circle or roundel. No. 1 is a beautiful Saracenic fabric woven at Iconium in Asia Minor about A.D. 1220, for Kay-Kubād, a Sultan of Rum. The arrangement of the pattern, however, is clearly based on the earlier Sassanian designs.

A magnificent fabric of this period is illustrated in fig. 19, in which the pattern consists of a series of roundels, 32 inches in



FIG. 19.—Byzantine Medallion.

diameter, containing a decorative treatment of the Elephant, and the symmetrical tree of life.

This fine silken fabric, in Tyrian purple, was presented by Leo III. to Charles the Great, in 801, and was found in his grave at Aix-la-Chapelle.

The saddle-cloth upon the back of the Elephant is perhaps the earliest illustration of that type of pattern which is so distinctive a feature of Eastern rugs.

In the 6th century there was an interaction of Sassanian and

WOVEN PATTERNED FABRICS

Byzantine art. Looms were set up in the Imperial palace at Byzantium, for the production of woven fabrics exclusively for the Court. At this period the raw silk was imported from the Far East, but during the reign of the Emperor Justinian, sericulture was introduced into Europe for the first time.

The story of its introduction relates that two monks, returning from a pilgrimage to "Serinda" (thought to be Khotan) in A.D. 555, brought, secreted in their hollow staffs, the eggs of the silk moth and the seed of the mulberry tree.

Some interesting woven patterned fabrics have been found among the tapestries at Akhmîm (Panopolis), which were probably from Syrian or Byzantine looms. These fabrics were woven into definite shapes for enrichments of robes or vestments. Fig. 20 is representative of the circular medallions which apparently were used



FIG. 20.—Medallion of Alexandria or
Hither Asia.

extensively for this purpose. In this connection, on plate 13, are also examples of the horizontal banding and of a vertical panel. They are splendid specimens of the weavers' craft, showing a high degree of achievement in the beauty and the fineness of the texture and the dyeing of the silken fibres.

The old Roman dignitaries wore a round purple patch upon their vestments. In the Court of Byzantium this was changed to gold upon purple, and known as *Chrysoclarus*. Frequently the vestment was enriched with a golden cross, the fabric being then known as *Stauracin*. When the vestment had a number of such crosses it was *Polystauron*; fig. 21 is a good example of this *Polystauron*. It is from a mosaic in the Baptistry of St. Mark's, Venice; and represents St. John Chrysostom, one of the four Greek Fathers, wearing an ecclesiastical vestment enriched with the roundels and crosses which were so frequently used during the early period of the Church. Similar patterns are found on the contemporary mosaics in the Cathedral at Monreale, Palermo.

An interesting example of early weaving, corresponding in type with the Sassanian and Byzantine patterns, was found on the body of St. Cuthbert in the Cathedral at Durham.

St. Cuthbert died in 687, yet the body was not interred at

ASIATIC FABRICS

Durham until the end of the 10th century. The body was wrapped among other fabrics, in a fine linen sheet well waxed; a thick robe of silk, woven with the figure of a knight, and a robe of thick soft silk of purple and crimson, having a woven pattern composed of a circle of two feet in diameter, within which is a representation of a throne, placed upon water, with fishes and ducks, attributes of St. Cuthbert.

This example (fig. 22) is somewhat fragmentary in design, and does not show the same masterly drawing and distribution that distinguishes the contemporary Byzantine fabrics, suggesting rather the product of an early German or English loom.

There were also found with these robes a beautiful embroidered *stole* and *maniple*, bearing the inscription of the Bishop "Fridestan," who died in A.D. 933, and this gives an approximate date for these interesting robes.

Beautiful examples of another class of silken fabrics are preserved in the Cathedrals of Zante and Mayence, and in the Victoria and Albert Museum. The ornament, in outline only, has flowing ogival bands, enclosing symmetrical floral forms; two representative examples of these beautiful patterns are given on plate 14. Another fine example of this class was the robe found on the body of the German Emperor, Otho the Great (A.D. 936-973).



FIG. 21.—St. John Chrysostom, Venice.

These fabrics possess excellent technical qualities of weaving, together with a perfect distribution and reticence of patterning that bear tribute to the skill and taste of the early craftsman.

ASIATIC FABRICS

Although remains of Asiatic woven fabrics are rare, there is no doubt that the art of figured weaving reached there a high degree of excellence before it did so in Europe.

The significance of Eastern ornament, the perfection reached in the cultivation of silk and cotton of exquisite fineness and delicacy,



BYZANTINE WOVEN SILK FABRICS.

X or XI Century.

FLORAL TYPE OF PATTERN

combined with the traditional love of sumptuous costume, have not only tended to preserve the distinctive character of Eastern fabrics throughout many centuries, but have always exercised a potent influence upon the construction and patterning of medieval European fabrics.

Megasthenes, writing of the Indians, says: "Their robes are

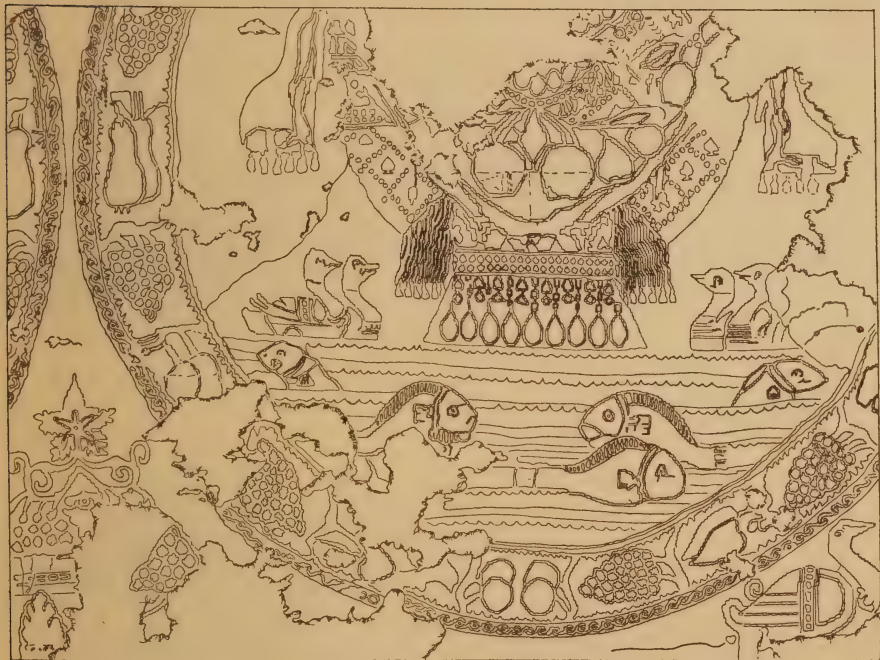


FIG. 22.—Silk Robe.

X Century.

Found on the body of St. Cuthbert in Durham Cathedral. Purple and crimson in colour, the pattern woven in gold.

worked in gold, and with various stones, and they wear also flowered garments of the finest muslins."

This passage, together with that of Periegetes, that "the Seres (Chinese) make precious figured garments resembling in colour the flowers of the field," clearly indicates the floral type of pattern that characterised the ancient fabrics of China and India; a type that has remained so persistent a feature to the present day.

INDIAN FABRICS

INDIAN FABRICS

India had reached a high degree of civilisation before it was invaded by Alexander the Great in B.C. 327.

This invasion doubtless left the influence of the Persian tradition upon the native Hindu art; and this influence was still further developed by the commercial intercourse between Persia and India, and by the Arabian invasions of India in A.D. 711, when a Mohammedan dynasty was established (711-1153); but it was under the great Mougul dynasty (1525) that the beautiful cotton muslins and silken brocades of India reached their highest development.

Although silk had been cultivated and used in India from time immemorial, it was the beautiful cotton fabrics, often interwoven with gold, that were the glory of their weaving.

Speaking of the kingdom of Mosul, Marco Polo says:

"In this country they manufacture the finest cottons that are to be met with in any part of India. All the cloths of gold and silver that are called 'muslins' are made in this country, and those great merchants called Mossulini who carry for sale such quantities of spicery and pearls, and cloths of silver and gold, are also of this kingdom."

The finest of these gossamer webs of Dacca muslins were in the early centuries known as *Running Water*, *Woven Air*, or *Evening Dew*, poetic names which convey some idea of their delicacy and fineness. A turban cloth, 1 yard wide and 20 yards long, could be passed through a finger-ring.

The garments of India are differentiated by the racial conditions of caste and religion; having their origin in the remote past, and have undergone but little change in many provinces.

The native costume usually consists of a fabric woven to a specific shape, and of ample material, ready for use, and patterned only where it may be seen.

In other provinces the type of costume and its patterning have been largely influenced by the Mohammedan costume of made-up garments cut from the woven piece.

The chief garment of the Hindus is the *Dhotee*, a scarf or loin-cloth, usually 7 to 8 yards in length by $1\frac{1}{4}$ yard wide. It is woven of cotton or silk, or of silk alone. Its patterning is frequently a check or stripe, with narrow borders and ends of ornament.

The *Loongee* is a scarf worn over the shoulders and chest, woven of cotton, silk, or wool, and from 4 to 6 yards by $1\frac{1}{2}$ yard; frequently patterned with checks or stripes, with narrow borders and wide cross bands of ornament.



1



2

SHAWL PATTERN, SILK & COTTON, HERAT.



3

SILK KINCOB, AHMEDAHAD.



SILK KINCOBS,
BENARES.

4



5

CASHMERE SHAWLS

The *Saree*, or woman's plaid, is the common dress of the Hindu women of all ranks, as well as of many Mohammedans.

The *Turban*, worn by Hindu and frequently by Mohammedan, is usually 9 to 12 inches wide, and 15 to 25 yards long; but is frequently woven 60 yards in length with a proportionate width, bands of ornamentation, varying from half an inch to several inches wide, are woven across the ends of the piece, frequently supplemented by a narrow border running the length of the piece.

Coloured stripes in mixed fabrics of silk and wool are common, the colours being green and crimson, or yellow and crimson, with delicate patterning of floral forms; these are undoubtedly the most ancient of Indian fabrics.

Among the Hindu and Mohammedan upper classes, costumes cut from the woven piece and corresponding to the European made-up garment are worn; a style that dates back to the Mohammedan invasion, and was sometimes followed, though reluctantly, by the Hindus. These garments of silk, or cotton, or silk interwoven with gold and silver, like the Hindu cotton fabrics, are invariably richly brocaded with pattern. The beautiful *kincobs* are representative of these brocaded patterns (Nos. 3, 4, 5, plate 15).

The Cashmereshawls were famous for their technical qualities of weaving and material, and for the beauty of design and colouring.



FIG. 23.—Indian Pine.

The distinctive feature of the ornamentation is the free use of the pine, which is, together with the ground, filled with small floral forms.

Fig. 23, taken from a shawl weaver's pattern book, about 1850, is an interesting example of the pine pattern. It is also instructive, showing that the weaver was allowed a free hand in the interpretation of the floral details, which in the sketch are just suggested by the designer.

The finest of these Cashmere shawls are woven of the wool of the Thibetan goat; and a shawl of a full flowered field of the finest quality of wool will cost in Kashmir £300.

These shawls are usually woven in separate pieces corresponding



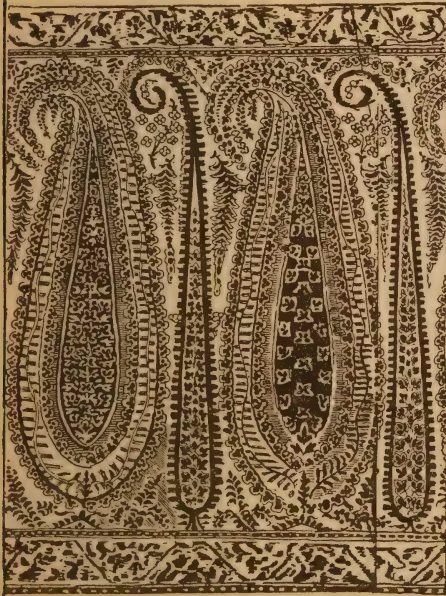
CRIMSON SILK & GOLD, SIAM.

1



SILK & COTTON BROCADE, BOORHANPORE

2



SILK & WOOL CASHMERE SCARF

3



SILK KINCOB, BENARES.

4

CHINESE FABRICS

to the shape of the larger pines, these are then sewn together with such precision that the sewing is imperceptible. Nos. 1, 2, plate 15, are good examples of the Cashmere pine on the smaller shawls of cotton and silk, and No. 3, plate 16, of a small silk and wool scarf.

The characteristic feature of Indian patterning is the typical Mohammedan division into definite ornamental spaces or shapes, which are filled with a decorative treatment of floral forms, such as the Date or Palm, the Pine, the Iris, the Lotus, and the Rosette. The pine is treated occasionally as a single flower, but more frequently as a cluster of flowers, which still retains the distinctive form of the pine (plates 15, 16, and 93).

This decorative representation of the inflorescence of plants and trees, selected, doubtless, for their significance as symbols of life, is typical not only of Indian, but of all Eastern art, differing only in the mode of interpretation and arrangement of pattern.

In Indian art, symmetry and alternation play an important part in the arrangement of pattern, with a somewhat conventional or formal treatment of the floral forms, as compared with the more frank interpretation in Persian art.

The Siamese textile designs frequently correspond in type with those of India, but with a greater insistence upon the triangle and diagonal line in the planning of patterned fabrics. No. 1, plate 16, is a characteristic example of Siamese design.

The great development of Indian cotton printing during the 16th to 19th centuries has naturally caused many fine representative examples of Indian design to be produced in that class of fabric, and specimens are illustrated in that section (plates 88 and 90-94).

CHINESE

The woven silk fabrics of China have a splendid reputation for beauty and richness of material and distinctive patterning. The tradition of the art of weaving, in China, is lost in the mists of antiquity, yet the textures and patterning of to-day undoubtedly retain many of the characteristic features of the past.

Abundant references are found in the Chinese medieval literature, descriptive of the types of patterns woven upon the fabrics of the earlier dynasties.

A Chinese book, written in the latter part of the Ming Dynasty (A.D. 1386-1628), speaks of the ancient silk brocades of the Han Dynasty (B.C. 206-A.D. 220), which had designs of dragons, birds, and flowers.

It is recorded that in the 3rd century A.D., the Chinese Emperor,



Indigo blue ground; old gold ornament.



Raised pattern of flowers and butterflies in dark purple on blue ground.

CHINESE SILKS.

XVIII-XIX Centuries.

THE SUNG DYNASTY

Ming Ti, made a presentation to the Emperor of Japan of five rolls of silk, brocaded with dragons woven upon a crimson ground.

A description is here given of a few out of fifty brocaded patterns of the Sung Dynasty (A.D. 960-1279).

"Floral emblems. Dragons coiling through a hundred flowers. Lotus and Tortoises, emblems of Longevity, and Tree peonies. Wild geese flying in the clouds. Squares and Medallions of white flowers."

This description fittingly illustrates the characteristics of ancient Chinese patterned fabrics, in which the ornamental details were chosen for their significance as emblems of sovereignty or seasons, or of happy augury.

This is illustrated in plate 18, where the symbol of longevity is prominently displayed above the dragon.

The intermingling of animals and floral forms is characteristic of all Asiatic and early European art and dates back to the remote past.

Marco Polo, in his travels in China (1275 A.D.), speaks of "the housing of cloth fancifully and richly worked in gold and silk, in figures of birds and beasts, that were upon the 5000 elephants of Kublai Khan, in Kanbalu (Peking)."

Of the beautiful flora of China the chrysanthemum, the peony, and camellia are largely used as motives in patterning, together with butterflies and a type of foliage suggestive of sea-weed. Representative examples of these are given on plates 17 and 19.

Geometrical diapers of polygon shape, enclosing radiating flowers and diagonal frets, are also prevalent.

The key or fret, and its variant, the *svastika* or *fylfot*, play an important part in the ornament of many nations, but more especially in that of China and Japan.

These frets are used occasionally alone, but more frequently in conjunction with floral or animal forms, as in plates 18 and 19. The antiquity and persistency of the fret as an ornamental feature is remarkable, as similar forms to those shown on the blue damask (plate 20) are also found on some bronze vessels of the Chow Dynasty (B.C. 1122-255), which indicates the persistency of the early symbols in Eastern art.

Chinese fabrics sometimes consist of these floral motives (plates 17 and 19 lower), or of geometrical patterns (plate 20); the floral pattern, as in plate 19, often appears delightfully free, but in reality conforms to strict but unseen conventions rather after the fashion of the structural basis of a musical piece, such as a sonata or fugue.

Chinese patterned fabrics are characterised by fine technical



CHINESE BROCADE.

Probably XVIII Century.

Removed from the Summer Palace, Peking, in 1860. Part of a seat cover. Bright yellow ground; design in blue, green, and red; much gold thread.



Part of a hanging, the dragons woven in blue and flowers in dull red on a sepia background.
The border, framing a red flower in bloom with green foliage, is worked in gold thread
on green silk.

CHINESE SILK VELVET BROCADE.



Table hanging worked in dark and light blue ; flowers white on a rich gold background.

CHINESE SILK TAPESTRY.

XVIII Century.



Upper : Pale blue and yellow ornament, white outline, deep gold ground.

Lower : Indigo blue warp and weft.

CHINESE SILKS.

XVIII-XIX Centuries.

CULTIVATION OF SILK

qualities of material and weaving, combined with skilful planning and significance of pattern.

Colour symbolism is an important feature of all Chinese art, especially that associated with religious rites. In the Temple of Heaven during the religious ceremonies blue is the prevailing colour; blue light is transmitted into the building, the sacrificial vessels are of blue porcelain, and the robes of the priests are of blue brocades. Yellow brocades are used in the Temple of Earth, red in the Temple of the Sun, and white in that of the Moon.

The ancient Chinese kingdom had an enormous trade in raw silk and woven fabrics. Marco Polo, speaking of the city of Kanbalu (Peking), says that "no fewer than a thousand carriages and pack-horses, loaded with raw silk, make their daily entry," and that "gold tissues and silks of various kinds were manufactured to an immense extent in many parts of China, perhaps more especially at Nankin."

Marco Polo also relates that cottons woven in coloured threads were largely produced and sent to various parts of the country.

North of the Yellow River the cultivation of silk was not carried on, probably for climatic reasons; but Marco Polo speaks of the beautiful white camelots or camoca, manufactured of fine wool and camel's hair, which were sent to other countries. This fabric was used extensively in England during the 14th century for church vestments, and for the draping of State beds. In 1385 the Royal Chapel at Windsor had a set of vestments of white camoca, and Lord Despencer in 1375 wills to his wife "my great bed of blue camaka, with griffins, and another bed of camaka, striped with white and black." These fabrics no doubt were woven in North China.

Tradition ascribes the introduction of silk culture to the wife of the Emperor Hwangti (B.C. 2602), and frequent allusions to the rearing of the silkworm are found in Chinese literature as early as B.C. 780. An historian records that during the reign of the Emperor Ching-Tang (B.C. 1743), there was a seven years' drought; at the close of which the emperor repaired to the sacred mulberry grove to pray for rain.

The production and consumption of silk is still enormous in China, as it is the chief material for the clothing of the people. Of the many provinces producing silk and silken fabrics, Hoochow takes the first place; followed by Kiangsu, Anhwei, Chêhkiang, and Kwangtung. In Shantung a coarser kind of silk is woven, known as *Shantung Pongee*, and used as an article of summer clothing.

Although cotton was known in the early Chinese dynasties, it

JAPANESE FABRICS

was not until 1364 A.D. that the cultivation of it was established, chiefly in the provinces of Chêhkiang, Kiangnan, Kiangsu, Hupeh, Hunan, and Fukien; where it is still largely produced, but it has never reached the degrees of excellence of the silken fabrics of China or of the cotton fabrics of India.

In many districts the greater part of the cotton only leaves the farm where it is raised in the form of cloth, as all the processes of cleaning, flocking, spinning, and weaving are carried on close to the cotton farm.

These cotton cloths are woven on hand looms chiefly by women (fig. 6). The cloths are usually 16 to 20 inches wide and have a plain weave. Much of the cloth is dyed indigo or black, the patterns being produced by block printing or stencilling with a resist of ashes, flour, and glue or gum, before the fabric is dyed.

Good grass cloths are used extensively for summer wear, they are woven in the provinces of Kwangtung, Kwangsi, and Kiangsu. Woollen cloths are not woven to any appreciable extent in China, warmth being supplied by wadded clothing.

Cotton yarn from the numerous spinning mills in Bombay, and the district, is now largely imported into China, where there is an extensive demand for the coarser counts; and Japan also has now extensive mills in India for the spinning of cotton for the Japanese markets.

JAPANESE

The Industrial Arts of Ancient and Medieval Japan were undoubtedly derived in large measure from those of China: hence in the early products of the Japanese looms the beautiful flora and fauna of nature; the chrysanthemum, peony, iris, lily, bamboo, cherry, or plum, with birds, fishes, and dragons, with their significance of life or of the seasons, are used as elements of patterning having similar decorative conventions to those of China.

Modern Japanese patterns are differentiated from those of China by a more capricious planning, and a greater degree of realism in the interpretation of natural forms; not the realism of Western ideals, but the realism of *drawing* and *structure*, in fact "pattern" with all its significance and beauty of line and form.

Their spontaneity and accuracy of craftsmanship, their keen and alert vision for the beautiful and the significant in nature, and their singular, though clever, conventions in the representation of the human figure, are essentially Japanese. The conventions employed in the delineations of the human figure are probably due to natural



JAPANESE
COLOUR PRINT
by Shunsen.

XVIII Century.



Green silk brocade, part of a "No" dancer's robe, woven in purple and gilt paper strips.
Birds in flight, snow on bamboos and wisteria stems.

XVIII Century.



Dark blue silk, flying sparrows in brown and gilt, bamboo stems and foliage in white.

JAPANESE BROCADES.

Early XIX Century.



JAPANESE SILK BROCADE.

Late XVII Century.

Part of a Buddhist priest's vestment, woven with strips of silvered paper.

Black ground ; pattern in blue, gold, and brown.



Peonies and rosettes woven in gold silk and gilt paper strips on a ground of octagon and lozenge diaper.



Rich brown silk with flowers in bright gold, and foliage in blue.

JAPANESE SILK BROCADES,

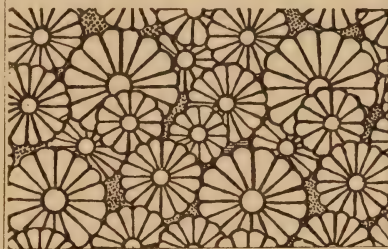
First half of XIX Century,



The Kiri-mon and Kiku Imperial Crests. 1



2



3



Woven Silks, XVIII Century. 5



Carp leaping waterfall (emblem of the successful scholar). 4



6



JAPANESE SILKS.

XVIII Century.

PERSIAN FABRICS

selection, or to their ceremonial and sumptuary laws. Plate 21, a colour print by Shunsen, is a representative example of costume, which from time immemorial has been prescribed by rules and modes for the various ranks of society. It was of such form as to render grace impossible, but an unlimited range of pattern was permissible and was usual in costume.

Plate 22 gives two excellent examples of impressionistic design, applied to the subject of birds and bamboo stems; plates 23 and 24 show more regular and conventional floral treatment.

On plate 25 are representative examples of the woven patterns, showing some of the fertility and readiness of invention of the Japanese weaver. Nos. 5 and 6 are interesting types of the hexagonal or honeycomb diapers that are so frequently used in costume patterning, while No. 1 gives one of their most significant heraldic patterns.

Plates 103 and 104 (pp. 109, 110) are characteristic examples of stencil designs for the patterning of woven fabrics, a process that the Japanese craftsmen have made almost exclusively their own, in place of the block printing so largely used in India and Western countries. In Japan, up to a comparatively recent period, all patterned fabrics were the result either of the use of the shuttle or the stencil.

These stencil plates, usually cut in a tough, yet flexible paper made from the bark of the mulberry tree, are marvels of delicacy, strength, and craftsmanship. Frequently the plate is of two layers, having hairs stretched between them to give additional strength and to avoid the use of ties as far as possible.

PERSIAN

The art of weaving and embroidery had reached a high degree of excellence in design and workmanship in the ancient kingdoms of Babylon and Persia, and this splendid tradition of patterned fabrics continued for many centuries, encouraged and stimulated by the conquering Mohammedans. In 1499 Persia was reconstituted as a nation under a dynasty of native rulers, the Safidian, the first since the days of the Sassanian kings. From the 7th century she had been merged in larger units, Arab, Turk, and Mongol, or divided into petty kingdoms. Not until this time can we definitely speak of an art of Persia, clearly differentiated from the art of her nearest rivals of the West, the Ottoman Turks, and from that of more Eastern peoples. The art of the Safidian period finds its culmination under Shah Abbas (A.D. 1586-1625)—a period of remarkable achievement in the production of splendid carpets, silken



Cover woven in red, pink, green, and blue silks, and silver and silver-gilt thread on a silver-gilt ground.

PERSIAN SILK BROCADES.



Brocaded silk cover in green, blue, and gold on salmon-pink ground, the border in same colours on a silver ground.

XVII Century.



PERSIAN BROCADE.

Late XVI Century.

Finely woven in green, red, blue, and gold silks and silver-gilt thread, the whole depicting a series of garden scenes, perhaps illustrations to a poem.



ROBE OF PERSIAN SATIN BROCADE. *XVII Century.*

Ornamental devices are woven in blue, green, and brown shades on a dull gold ground. A deep hem in rich crimson enhances the splendour of the garment.



PERSIAN SILK BROCADE.

Late XVI Century.

Woven for a robe of ceremony. Figures in green and white on a yellow-green ground.

PERSIAN FABRICS

brocades, and velvets, all having distinctive qualities of technique, design, and colour.

Persian designs are characterised by a rare selective taste in the interpretation of their beautiful flora; and show a singularly frank treatment of the pink, hyacinth, tulip, rose, iris, pomegranate, pine, cypress, and date. Their rhythm of arrangement, true sense of proportion, perfect distribution of pattern, and vitality of colour, bear tribute to the skill, taste, and resource of the medieval Persian weaver.

It has lately been realised that Chinese weavers produced patterns of a style not easily distinguished from Persian work.

This splendid tradition still retains much of its vitality, and suggestiveness of design and colour, in the production of modern carpets, with their decorative patterning and beautiful colour harmonies.

Plate 26 shows two treatments: the left-hand fabric has a rose and bird subject, repeated and reversed; in the other, the design is more conventional and symmetrical, after the fashion of a carpet pattern.

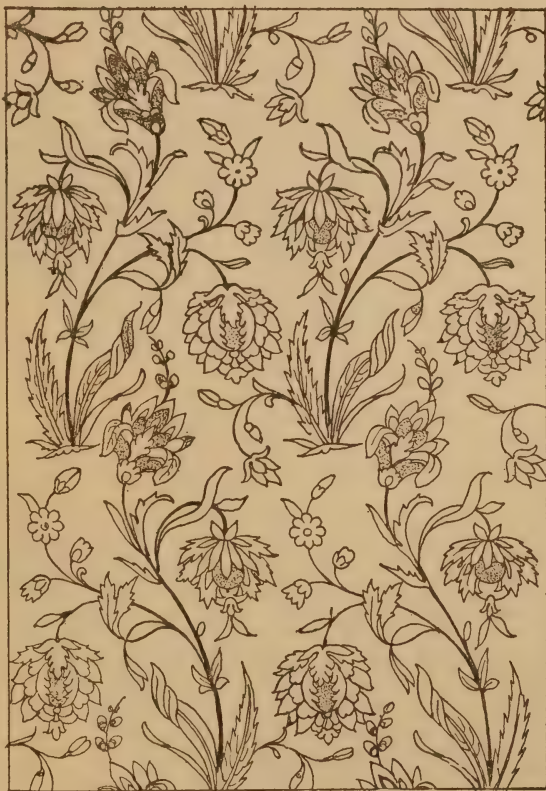


FIG. 24.—Persian Velvet.

Fig. 24, from a yellow silk velvet, is a representative example of the delightful freedom of drawing and planning that is so characteristic a feature of Persian patterned fabrics.

Plate 28 shows a robe of yellow silk brocade with a symmetrical design of well-grouped cypress trees, flowers, and birds. The cypress tree, which is so frequently an important feature of Eastern design, was doubtless selected partly for its significance, but also for its value in giving stability and boldness of mass to the design, and

OTHER ISLAMIC FABRICS

acting as a foil to the more delicate treatment of the birds and flowers. Persian velvets are the most beautiful in all Asia, and were mostly produced at Yezd and Kashan, those of the latter being of a finer texture than the Yezd velvets.

Plate 29 is taken from a characteristic brocaded pattern of the late 16th century; and the introduction of the figures, birds, animals, and fishes into the decorative landscape is typical of the daring of the Eastern craftsman. The pattern is admirably drawn, having considerable reticence of detail, combined with perfect distribution. The vertical lines of the trees, apart from their significance, give stability and a rhythmical quality to the design. Plate 27 gives a similar treatment.

Contemporaneously with the Persian fabrics, many fine velvets and brocades were produced at Broussa, Bilejik, Hereke, and Scutari in Turkey, corresponding in design with the broad ogival bands of Persia, but frequently having some of the detail distinctly Islamic in character. On plate 31 are two examples of early brocades showing Persian influence, where the pomegranate shapes are enclosed by bold ogival bands, upon which are trailed a delicate rendering of the rose, pink, and tulip. Plate 30 is also a representative example of this class, with the central filling of typical Mohammedan ornament.

The woven patterns of Persia have probably had a wider and more lasting influence upon European fabrics than those of either China or India, due doubtless to the interest and beauty of the natural form selected and the skilful patterning, and also to the migratory habits of the Eastern weavers.

OTHER ISLAMIC FABRICS

The rise of the Mohammedan power, which was destined to exercise such a remarkable influence upon the arts, was contemporary with the Byzantine civilisation.

The history commences with Mohammed (A.D. 570–632), who founded the religion. In 635 Damascus became the capital, and Kula and Bassora were founded in Persia. Jerusalem was captured in 637. Egypt was conquered in 641, Persia in 642, and Sicily in 827. Spain was invaded in 711, and India in 997. Thus the Arabs, from a roving tribe, became, by religious zeal and conquest, the most powerful and wealthiest nation of mediæval times, assimilating and encouraging the industrial arts of provinces and nations, and in none of the arts was their influence more widely felt than in that of woven fabrics.

The Fâtimide caliphs of Egypt (969–1171) and their courts wore sumptuous attire of figured silks shot with gold; magnificent tents of



TURKISH SILK BROCADE.

XVI Century.

Dark blue ogival panels surrounded by trailing flowers in red and white,
on a background of gold,



Crimson satin ground with gold and blue ornament,
partly outlined in white.



TURKISH SILK BROCADES.

XVI Century.

SICILIAN PATTERNED FABRICS

cloth of gold, velvets and silk damasks, patterned with elephants, lions, birds, and flowers, were also a part of the equipment of the court.

Considering the limitations imposed by Mohammed upon the use of natural objects, it is singular that the Arabs should have so largely encouraged the weaving of such decorative silken fabrics; no representation of any living thing was held to be permitted by the Prophet, nor the use of silk in the production of fabrics. His followers, however, avoided the literal interpretations by frequently mixing a cotton or linen thread with the silk and making the bird and animal forms somewhat formal or conventional in treatment.

Richly patterned fabrics of great beauty were produced in many provinces under the Mohammedan rule, but it was in Sicily that the art of pattern weaving reached its highest achievement. Almost immediately after the conquest in A.D. 827 the Sicilian looms in the Palace workshops at Palermo began to produce the distinctive patterns of animals, birds, and foliage, interwoven with inscriptions from the Koran, or the names of princes; for it was one of the privileges of the Saracenic rulers to have their names or an inscription interwoven with the rich silken fabrics intended for personal adornment.

These Arabian inscriptions, though originally introduced for their significance, were in later fabrics frequently used for their ornamental value alone.

An early Oriental writer tells that the Arabian princes wore rich robes woven with inscriptions in gold, and that the place set apart for such fabrics was *Tiraz* (the skirt of a robe).

The Sicilian patterned fabrics are of three periods: the first dates from the Arabian occupation of Sicily in 827-1140 A.D., during which period skilled weavers were imported from Byzantium, Persia, and India. The patterns were composed chiefly of roundels of the Byzantine type, or bands and stripes of various widths, containing bird and animal forms, interspersed with geometrical diapers, or arabesques within square or rectangular panels.

Fig. 25 is a remarkable fabric showing a mingling of Chinese and early Sicilian design. It was undoubtedly woven by a Chinese craftsman, possibly working in Persia after the Mongol conquest. The inscription states that it was woven for Master Abd-el-Aziz, on behalf of William the Second of Sicily (c. 1169-89). It is a portion of a coloured silk dalmatic, interwoven with gold, and was presented to the Cathedral of Regensburg by the Emperor Henry IV., who died in 1197.

A fragment of a beautiful red silk and gold damask was found in Henry's grave, and is now in the British Museum. The design



SILKS, POSSIBLY SICILIAN.

Light green ground; dark green ornament; birds' heads and rosettes gold.

D

XIII Century.

Upper: Pale purple ground; grey ornament; birds' heads, claws, and wing-shoulders gold.



SICILIAN BROCADES.

XIII Century.

1. Bluish-purple ground ; white and red floral ornament.
2. Red ground ; green hounds and geese ; gold chain and roses ; border roses white.
3. Red ground ; light blue foliage ; gold lions.

PALERMO PATTERNING

consists of symmetrically placed trees, birds, and animals, and is probably the earliest extant example of this characteristic Sicilian fabric patterning.

The second period commenced during the reign of the Norman King, Roger II., who, in 1130, introduced many skilled weavers from Greece and Byzantium, and enlarged the Imperial factory or *Hotel de Tiraz* at Palermo.

Hugh Falcandus, writing in the 12th century, speaks of this famous weaving establishment:

"It is impossible to pass over in silence the celebrated workshop in which silk is spun into different coloured threads. Here one can see stuffs made of single, double, and threefold thread, which are less expensive and require less skill than those made with sixfold thread, more raw silk being used for the more substantial material.

"Here fabrics are ornamented with a circular design, requiring for this reason great skill and a high price. There are also numerous ornamental patterns of various kinds and colours, woven in gold and silk threads."

This passage clearly indicates that gold was interwoven with the silk, and that the circular roundels, which were very characteristic of the Sassanian and Byzantine fabrics, were also a feature of the Palermo patterning of the 12th century.

This period was undoubtedly the most prolific and important of any for the production of sumptuous patterned fabrics; the designs are characterised by a splendid vitality, beauty, and interest of design, with perfect distribution and spacing. The patterns are composed of the palm and date trees, with their inflorescence, together with eagles, swans and ducks, lions, harts and dogs symmetrically placed. On plate 32 are three typical examples of this interesting period, and a fourth is given in fig. 26.



FIG. 25.—Chinese Weaving. XIV Century.



Gold pattern on violet ground.
ITALIAN, XIV Cent.



Pattern in gold on dark blue.
BYZANTINE, XI-XII Cents.



Ground originally red; patterns green and white; birds and animals gold.
N. ITALIAN, XIV Cent.
SARACENIC SILK BROCADES.



HISPANO-SARACENIC, XII-XIII Cents.

XI-XIV Centuries.

THIRTEENTH-CENTURY DESIGNS

The horizontal banding of the first period is continued with a greater degree of freedom in the elements and arrangement of the pattern. On plate 33 representative examples are given, showing considerable invention and decorative qualities of design.

Another characteristic feature of this period was the use of intersecting lines or bands, forming geometrical compartments, within which birds or animals are symmetrically placed. Four interesting examples of this type are given on plate 34.

Fig. 27 is a fine diaper pattern of this type. All these fabrics are distinguished by skilful weaving, beauty of colour, and the use of splendid material.

Grounds of crimson, olive green, or purple were usually interwoven with birds and animals in "Cyprian" gold, consisting of linen threads round which were wrapped strips of catgut or some animal substance, which was first silvered and then gilt.

The third period of Sicilian Art covers the first half of the 13th century, and is characterised by a greater freedom and diversity of design, and was probably due to a further importation of Eastern craftsmen, to meet the increased demands for these famous silks from Italy, France, and England.



FIG. 27.—Gold Ornament on Violet Satin.

Figures were frequently introduced, together with heraldic charges, animals, castles, and rayed suns, the foliage being more trailing and less symmetrical.

Fig. 28 is an unusual variant of the bird patterning for a woven fabric, having an all-over radiating design. A similar design is figured in Fischbach's "Woven Textiles" (*Ornamente der Gewebe*), plate 62, but the details are slightly

different, and the ground is purple with the pattern in white and gold.

Palermo was undoubtedly the centre of the Saracenic weaving industry, yet Persia, Syria, Egypt, and Spain produced richly



FIG. 26.—Early Sicilian Brocade.

SPANISH WORK

patterned fabrics corresponding in technical characteristics, if not in design, to those of Sicily.

No 1, plate 11, page 26, is an interesting example of Syrian weaving, similar in arrangement of pattern to the Sassanian and Byzantine fabrics given on the same plate, and to those of Palermo, spoken of by Hugh Falcandus (page 51); yet this design, a part of *Tiraz*, is inscribed with the name of Kay Kubād, who was a Sultan of Rūm, and reigned at Iconium (A.D. 1214-39).

In Spain, also, splendid Saracenic fabrics were produced; more especially under the patronage of the Caliphs of Cordova. As



FIG. 28.—Sicilian Silk. Green ground; indigo blue ornament.

early as the 10th century the Chronicle of Razzi the Moor speaks of the silks of Almeria. Magnificent *Tiraz* were woven in their palaces up to the 11th century, and the industry was continued in the 13th century by the kings of Granada.

Fig. 29 is a beautiful fabric of this period, contemporary with the building of the Alhambra (A.D. 1248), and like the ornamentation of that building, this pattern shows an entire absence of animal and floral forms, and has an inscription in Hispano-Arabic, "*Honour to our Lord the Sultan.*" The two brocades on plate 35



Red silk, floral and scroll devices in green and yellow,
and foliage in white.

SPANISH BROCADES.



Crimson damask, with pineapple pattern in green, white, and fawn.

XV Century.

EARLY LUCCHESE FABRICS



FIG. 29.—Moorish Brocade, Granada. Red ground ; ornament white, pale yellow, and green ; secondary pattern purple. *XV Century*

still show forms due to Moorish influence, though they date from the 15th century.

Granada, Malaga, Almeria, and Toledo were the chief centres of the later weaving industry in Spain.

In 1266 the Palermo weaving industry came abruptly to an end, through the Conquest of Sicily by the French, under Charles of Anjou, when the skilled weavers, carrying their splendid tradition of design and craftsmanship with them, migrated to Italy.

ITALIAN WEAVING—LUCCA

Italy, at this period (the 13th century), consisted of many independent States actively engaged in commerce and in the industrial arts, and keenly alive to the commercial and political advantages to be derived from an increase in such an important industry as that of weaving. Hence we find that a ready welcome was given to the Sicilian weavers in Calabria and other Southern States, but more especially in the North, where at Lucca they carried on their traditional craft of weaving beautiful and distinctive patterned fabrics.

Necessarily these early Lucchese fabrics have many of the characteristic features of the later Palermitan ones, rendering it somewhat difficult to distinguish between them ; but gradually the Sicilian distinctive patterning of animal and bird forms was eliminated, and although many of the essential features of the Sicilian patterns were retained, a new phase of design was entered upon by the use of boldly designed serrated leaf or floral forms and ogival bands, probably derived from Persia.

Representative examples of the early fabrics of Lucca are given on plates 36–37.



LUCCHESI SILKS.



LUCCHESI DAMASKS.

Early XIV Century.

LATE LUCCHESI FABRICS

The bold radiating flower of the pomegranate tree is the distinctive feature of plate 1, opposite page 2. This design is full of Oriental imagery, with the bird and chained dog within a boat, floating upon water on which float swans and ducks; it is suggestive of Persian origin.

Fig. 30 is a well-distributed ogival pattern, having a serrated flower enclosing a pair of rabbits.

Typical ogival patterns of the later Lucchese fabrics are given on plate 37, where the vine is used as the motive of the national



FIG. 30.—Oriental Weaving. Pattern in gold thread on deep blue ground.



FIG. 31.—Lucchese Pattern from Italian Painting.

patterning. This ogival framing was suggested frequently by symmetrically placed birds, as in fig. 31, which is from a picture by Spinello Aretino (1330–1408) now in the National Gallery. Aretino was probably also a designer for some of the later fabrics of Lucca.

This period of Lucchese industrial and artistic activity did not last for more than fifty years, for in 1315 the Florentines laid siege to the city and, capturing it, carried away many of the Lucchese and Sicilian weavers to Florence, which now took the chief position in the production of magnificent patterned fabrics.

FLORENTINE FABRICS

FLORENCE—VENICE—GENOA

The weaving industry was not new to Florence, for fine woollen fabrics had been produced there for fully two hundred years; and for some thirty years before the sack of Lucca. The Velluti family, who were perhaps the inventors of velvet in Europe, must have been weaving great quantities of this material in Florence, as there are records of large warehouses and works being erected in the Via de Velluti.

But with the arrival of the Lucchese weavers and the increase of the power and wealth of the city, there came a wider appreciation of, and demand for more sumptuous fabrics, and the Florentine weaving industry soon reached



FIG. 32.—Florentine Artichoke.

a remarkable degree of artistic and technical excellence and productive power, so that towards the end of the 15th century there were 16,000 persons engaged in the silk industry, and 30,000 in the woollen trade.

This continued for fully two hundred years until 1530, when the siege of the city was undertaken by Pope Clement VIII. and the Prince of Orange, who approached the city crying—

“Prepare, Florence, your brocades of gold; we are coming to purchase them with the measure of our pikes.”

The Florentine fabrics are singularly distinctive in technique of weaving, and in design; while retaining the beautiful symmetrical



FIG. 33.—Florentine Artichoke.

FLORENTINE VELVETS

and radiating Eastern floral forms, they eliminated the significant birds, animals, and inscriptions, which had so long remained a feature of the Mohammedan patterning.

A few examples of early Florentine patterned fabrics are extant, corresponding in type to the inlaid marble pavements of S. Miniato and the Baptistry at Florence, which date from the 12th century.

The symmetrical inflorescence (figs. 32-33), known as the *artichoke*, is the chief ornamental feature found in the fabrics of Florence.

This beautiful and distinctive Eastern form was in India, Persia, and Sicily, doubtless chosen for its significance as a symbol of life and fruitfulness, but in Italy it was probably selected chiefly for its ornamental or decorative value. The beauty of its details, the growth, symmetry, and radiation of parts, and the boldness of its mass, rendered it singularly appropriate to the process of velvet weaving.

The example on plate 38 is a fine representative Florentine velvet, distinctive alike in pattern and weaving; the bold sweep of the constructive lines and the beautiful radiating flower within a pointed cusp or leaf form, woven in ruby or blue terry and velvet on a rich yellow or cloth of gold ground, are characteristic features of the early Florentine velvets, many of which are of considerable size, the repeat of the pattern frequently being 22 x 48 inches.

Many of those sumptuous velvets were used for backgrounds or as cloths of estate, and as such are frequently represented in the early Italian and Flemish pictures, but their chief use was probably for the rich and costly vestments of the Church.

Many of the more sumptuous Florentine velvets are now in the magnificent textile collection at the Victoria and Albert Museum; probably the finest and most comprehensive collection of medieval fabrics in the world.

The four illustrations on plate 40 are representative of the various modifications of the Inflorescent or Artichoke pattern, found upon the fabrics of the 16th century. They are admirable in drawing, and distribution of pattern, and although distinctly Italian in type, are yet reminiscent of Eastern fabrics, especially No. 1, in which the small floral details upon the ogival constructive lines are distinctly Persian in character.

Variants of the pointed and leaf-shaped cusps that surround the radiating flowers are frequent; in some, the cusp is connected with the structural lines of the pattern, in others they are detached and just surround the flower. Plate 39 is a typical example of a rich cusp, forming a part of the constructive lines of the pattern.

Quite a number of these characteristic and interesting patterns



FLORENTINE VELVET BROCADE.

Rich red velvet on a ground of gold.

XV Century.



SILK DAMASK, SPANISH OR ITALIAN. *Late XV Century.*

Bright gold design on a red background.



FLORENTINE VELVETS.

Early XVI Century.



(1)

(2)

FLORENTINE DAMASKS.

XV Century.



ITALIAN SATIN BROCADE.

Late XV Century.

BROCATELLE PATTERNS

are represented upon the robes and vestments of the Saints and Church dignitaries in the pictures by the early Flemish masters—the brothers Van Eyck, Hans Memling, Jan de Mabuse, and Bernard Van Orley; and also by the early Italian masters—Andrea Ocagna, Spinello Aretino, Benozzo Gozzoli, Fra Angelico, Carlo Crivelli, and Marco Marziale, which confirms the authenticity of the date of these distinctive patterns. There is also a great probability that many of these artists contributed designs for the richer class of fabrics, especially Carlo Crivelli, who, in his figure subjects, shows a wider range of patterned dresses than most of his contemporaries.

Fine examples will be found in *Fifteenth Century Italian Ornament*, by Sidney Vacher. No. 2, plate 41, is selected from his work as being representative of the loose Florentine cusp, and No. 1 of the Lucchese type.

On the 15th century rood screens at Southwold in Suffolk, and Ranworth, Norfolk, many interesting representations of patterned fabrics are painted in oil colours upon the backgrounds and the carved wooden figures of the Saints. These patterns bear a marked resemblance to the silk and gold fabrics of Lucca and Florence.

Many bold and symmetrical patterns of a class called "Brocatelle" were produced during this period. The well-designed patterns, in blue or purple on a gold ground, were distinctive in type, the ogival stems and flowers being filled with rectangular and triangular details, giving a simplicity to the design and a strength to the fabric.

In addition to the sumptuous velvets and brocatelles of this period, the Florentine looms also produced splendid brocaded damasks. These fabrics have a damask ground, with a subsidiary pattern woven in the same material and colour, over which the chief pattern is brocaded in coloured silks.

Plate 42 is a beautiful example of this class, with the subsidiary cusp in light damask, and the brocaded pattern showing an interesting survival of the bird forms that characterised the Sicilian and Lucchese designs.

This splendid period of industrial activity was not confined to Florence, although the Podesta and the Consuls of the city endeavoured to retain their supremacy in the production of silken fabrics.

In the 14th century it was enacted that no member of the silk or wool guilds could leave Florence without a permit, and pawn-brokers were forbidden to accept silk, or any tool used in the craft of weaving.

The raw silk for these northern Italian fabrics up to this period

CULTIVATION OF ITALIAN SILK

had been imported from the East, but in 1444 it was enacted that on every farm there should be planted at least five mulberry trees annually until the number reached fifty.

The successful cultivation of Italian silk, together with the growing power, wealth, and industrial activity of Venice, Genoa, and Milan, gave an enormous impetus to the textile industry, and the splendid productions of their looms, together with those of Florence, were used not only by the wealthy nobles and citizens of Italy, but were largely exported to France, Flanders, and England, to be used for ecclesiastical vestments or the dress of princes and nobles.

Many beautiful patterned fabrics from the various North Italian looms are extant, in which the radiating Florentine inflorescence is the distinctive feature.



FIG. 34.—Florentine Floral Pattern.

Plate 2 (facing page 3) is an interesting example of damask brocade; the pattern is planned on ogival lines, flattened to form hexagonal shapes within which are the typical pomegranates with their radiating inflorescence surrounded by

cusps of ground damasks. The coloured illustration given on plate 43 is a bold and effective pattern, more conventional in its interpretation of natural forms than plate 2, but equally decorative in its patterning.

A beautiful example both in technique and design is given in fig. 34, taken from a fragment of a yellow and crimson *lampas*; the radiation of the pomegranate towards in place of from the central flower, is an interesting and unusual variant of this type of pattern.

About the middle of the 16th century the Venetian and Genoese looms began to take precedence in the production of splendid patterned fabrics, especially velvets and brocades. Plate 44 represents one of the most beautiful of the Venetian brocades,



ITALIAN SILK BROCADE.

XV Century.



VENETIAN SILK BROCADE.

Early XVI Century.

Floral design in blue, red, green, and brown silk, the connecting crowns in bright gold, on a ground of silver tissue.

GENOESE COLOURED VELVETS

having the usual Eastern ogival constructive lines, enclosing a decorative and symmetrical treatment of the lily and iris, with that delicate superimposed patterning which is so marked a feature of the Persian fabrics. (See plate 31.)

Owing to the commercial intercourse that took place in the 16th and 17th centuries between Venice and the East, the Venetian fabric designs correspond very much, both in materials and patterning, with those of Persia and Syria, and it is this Persian flavour that differentiates the products of the Venetian looms from those of Florence, Genoa, and Milan. On the other hand, fig. 35, a fine red velvet brocade, though the design is Italian, is undoubtedly of 17th-century Turkish weaving. It is woven in silk and cotton, and was possibly manufactured for the Western market.

Genoa was especially distinguished for its coloured velvets. The richness of the material, the excellence of weaving, and the beautiful and wide range of colours, made the Genoese velvets famous throughout Europe during the 16th and 17th centuries.

On plate 45 are the representative examples of these velvets, which were used not only for costume, but also for hangings and the covering of furniture.

One (No. 1) has the bold symmetrical artichoke, with subsidiary stems, bearing leaves and fruits, which still retain traces of their Eastern origin.

A beautiful series of rich brocatelles, usually having a red silk warp and yellow weft, and interwoven with silver threads, were produced chiefly at Venice during the 16th century, and were used for vestments and hangings, and for ladies' dresses. On plate 46 are two representative examples showing the distinctive ogival patterns, having an Arabian type of foliage that is invariably used on this class of fabric.

In the latter part of the 15th and the early 16th century the vase made its appearance as an element in Italian textile design.

It first appeared in a modest way, but it gradually assumed a degree of importance not commensurate with its value or appropriateness as an element of patterning. The concentric lines of the vase and the necessity for some degree of perspective to interpret its



FIG. 35.—Red Velvet woven in Silk and Cotton. TURKISH.



GENOESE VELVETS.

XVII Century.



1. Red and white ornament on yellow ground. SPANISH.



2. Yellow and white silk and silver thread. SPANISH.

BROCATELLES.

XVI Century.

THE VASE PATTERN

shape, undoubtedly prevented it from becoming an established feature of pattern design for woven fabrics.

It is singular that the form and detail of these vases are usually



FIG. 36.—The Vase Pattern.

Renaissance in character, while the rest of the pattern is clearly Eastern in type. No. 2, plate 46, is representative of the earlier form, and fig. 36 of the later. Fig. 37 is another interesting example of this type.

CHANGES IN DESIGN

Towards the end of the 16th century further changes took place in the patterned fabrics of Italy, owing to the introduction of the Spanish type of dress, with its narrow folds and slashings. The patterns were usually small and well adapted for the short dark coloured cloak worn at all the courts in the time of Raphael and his contemporaries. Differing from the preceding patterns with their pronounced formal and continuous construction, the pattern is now frequently arranged as a symmetrical spotting or *semé* of floral forms. Some representative examples in silk and wool are given on plate 47. No. 1 has a well-distributed floral pattern with birds and animals that are Sicilian in character. Nos. 2, 3, and 4 are variants of these distinctive floral spottings.

Representative examples of the smaller velvets of this period, beautiful in technical qualities of weaving, and in the arrangement and distribution of pattern, are given on plate 48.

The doublet of green velvet given on plate 49 has another variant of these small patterns. This example is said to be of English manufacture of the early 17th century; if so, the distinctive Oriental floral form and stripe show that it was probably the work of Italian weavers, many of whom were engaged in England during the 16th and 17th centuries.

Plate 50 is from a painting by Frans Hals (1584-1666). The child's dress is clearly painted from a patterned fabric, having a *semé* of pomegranates, probably woven on a Flemish loom.

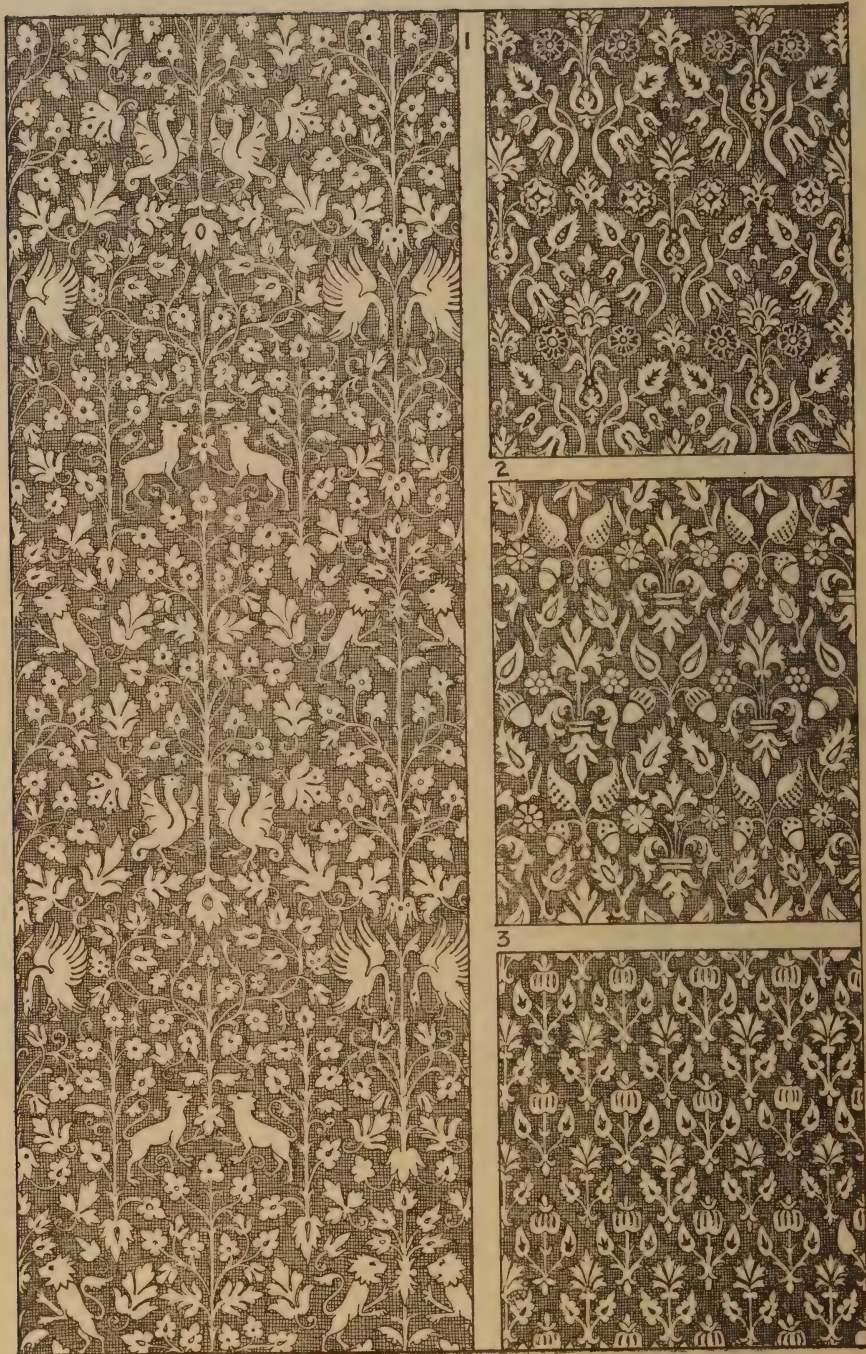
In addition to the more sumptuous silken fabrics of the Italian looms, many mixed fabrics of linen and wool were produced contemporaneously at Florence, Milan, and Venice. The patterns of these, usually in blue and white, or red and white, vary considerably in scale, from 5 to 22 inches in width. The patterns, consisting of a *semé* of pomegranates and conventional flowers, are distinctly Eastern in character. These fabrics, which must have been produced extensively in Florence and Milan, are admirable in the ornamental detail and planning, and show considerable skill and economy of means in weaving.

Contemporary with these Italian fabrics, similar ones were produced in large quantities on the Flemish looms at Bruges, Ghent, Ypres, and other weaving centres.

Plate 51 gives a very beautiful silken robe, said to be of the

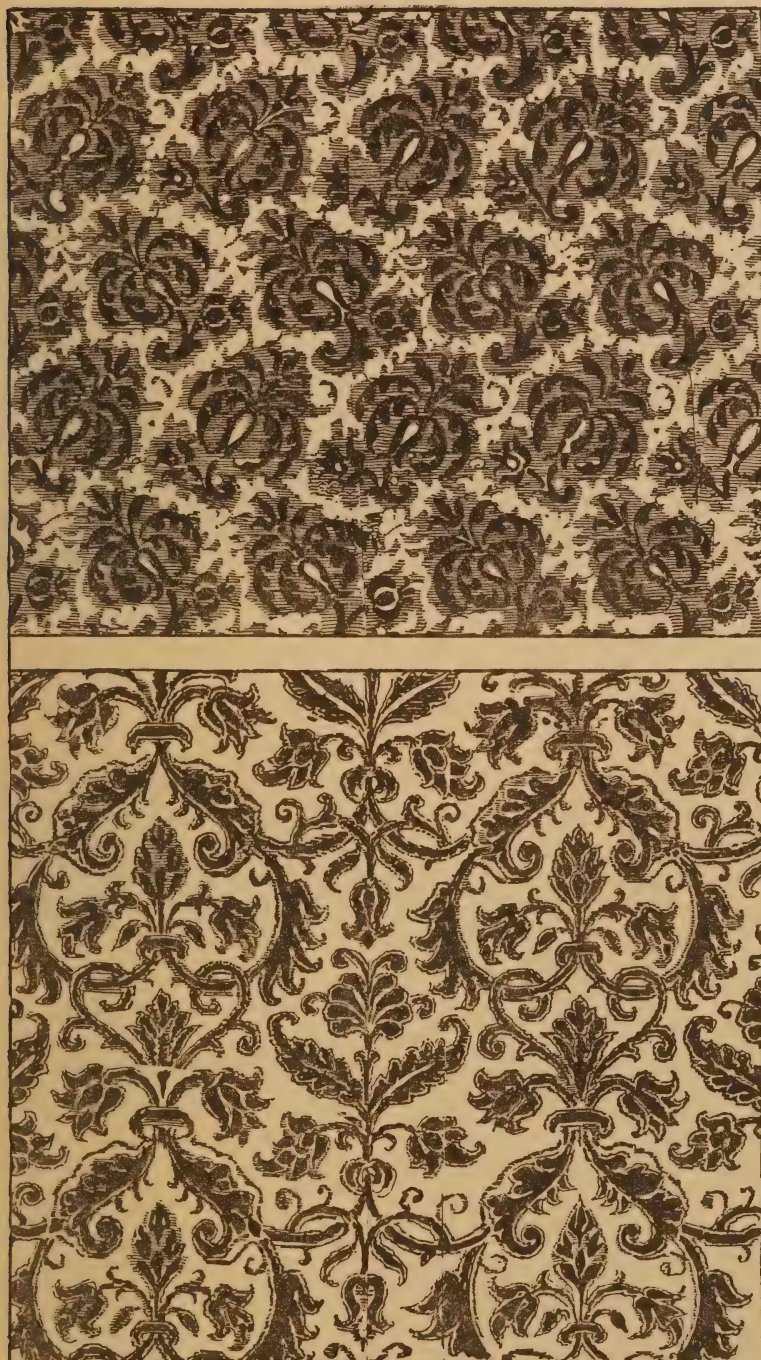


FIG. 37.—The Vase Pattern.



NORTH ITALIAN BROCADES.

Late XVI Century.



Crimson velvet ground; blue ornament.
ITALIAN VELVETS. *XVI Century.*

MIXED FABRICS

time of Queen Elizabeth. Its *fleurs semées* and slashings suggest an Italian loom, probably Venetian.

Plate 53 is from a magnificent set of bedroom hangings in coloured velvet, now in the Victoria and Albert Museum. This set consists of twelve lengths, twelve feet long and twenty-two inches wide; six gilded chairs and a couch are also covered with the same sumptuous fabric.

The ornamentation is characteristic of the later fabrics of Italy, having a somewhat natural treatment of the flowers and a lace-like arrangement of the ground shapes.

A letter written by Sir Thomas Robinson in 1731, describing a visit to Houghton Hall, built by Ripley for Sir Robert Walpole in 1722, throws an instructive light upon the furnishing of a house with such velvets, and also upon the social customs of the period.

"Houghton is the best of its size in capability for reception and convenience of state apartments, the furnishing of the inside is a pattern for all great houses.

"The vast quantities of mahogany; finest chimneys of statuary; ceilings of the modern taste by Italians; furniture by Mr. William Kent, carved and finely gilt; walls hung with Genoa velvets and damask, and so plentiful, that this one article is the price of a good house, for in the saloon they are to the value of £3000."



FIG. 38.—Genoese Velvet. Late XVII Century. Baroque style.

Fig. 38 is a drawing of this specific example, which still covers the walls and the furniture of the saloon at Houghton.

Horatio Walpole, brother of Sir Robert, employed Ripley, in 1724, to build Wolterton House, Norfolk, and in the west drawing-room the furniture and the walls are covered with Genoa velvet corresponding to that of Houghton. Other examples are in the saloon, the drawing-room, and the green state room at Holkham, which was built by William Kent in 1734, for Coke of Norfolk.

These give some idea of the extensive use of such fabrics during the early 18th century in England.



DOUBLET OF GREEN VELVET,
ITALIAN.

Early XVII Century.



NURSE & CHILD, from a
painting by FRANS HALS.

Early XVII Century.



BROCADED SILK ROBE,
ITALIAN WEAVING

XVI Century.

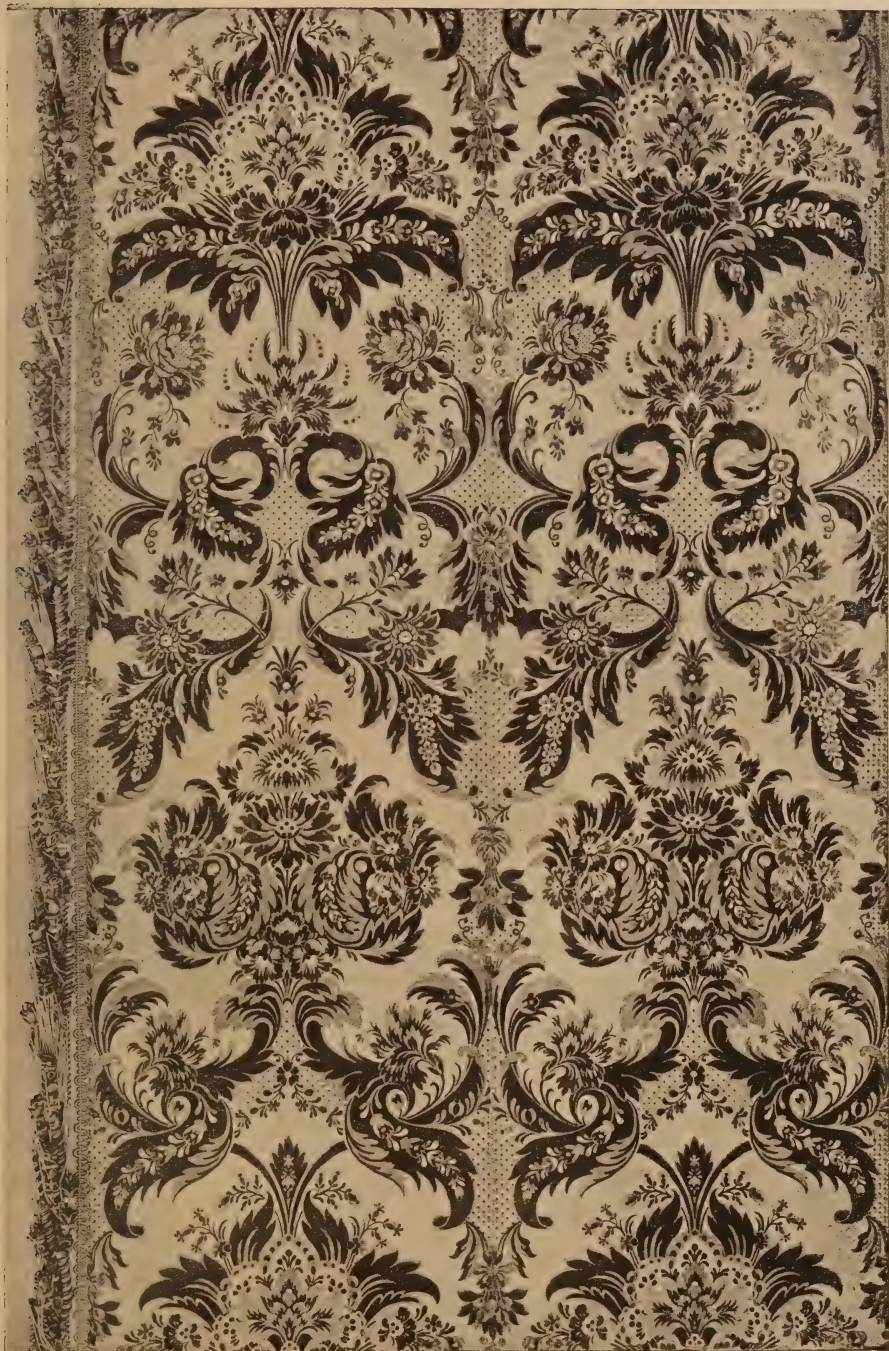
Cream silk, pattern in gold, with touches of blue, green, and red.



ITALIAN SILK VELVET.

XVII Century.

Red and gold.



VENETIAN SILK VELVET, BAROQUE STYLE.

About 1700.

Pattern of a set of bedroom hangings ; foliage in two shades of olive green ; flowers dull red with touches of blue, all on a white ground,



SILK BROCADE COVER, SICILIAN.

XVII Century.

On a light brown ground, the subjects of the pattern woven in brilliant shades of blue, red, purple, and green.



BROCADED BORDERS.

XVI Century.

FRENCH FABRICS

On plate 55 are some interesting borders. In three of these there is the small subsidiary border which is a characteristic feature of Indian and Persian ornamentation.

At the end of the 17th century many sumptuous brocades, often richly interwoven with gold and silver threads, were produced at Venice, Milan, and elsewhere. Plate 54 is a Sicilian example in particularly bright colouring. These fabrics, although rich in material, do not compare favourably with the earlier ones in point of design, as there is sometimes a greater insistence on textures than on good proportion and beauty of form.

FRENCH FABRICS

LYONS

It is perhaps singular, that in France, during the 13th, 14th, and 15th centuries, when so many magnificent abbeys and cathedrals were built and equipped with splendid statuary and carvings, stained glass and goldsmiths' work, but few records are found of the productions of the sumptuous woven fabrics which must have been largely in request for the vestments of the numerous dignitaries and officers of the Church.

Most of these rich vestments were no doubt obtained in France, as in England, by gifts or by purchase from the famous workshops of Sicily or of North Italy.

In 1480 Louis XI. introduced the manufacture of woven silks at Tours, and in 1520 Francis I. brought together many skilled weavers from Italy and Flanders, and established some at Fontainebleau under the direction of Salomon de Labaines, the King's weaver, for the production of tapestry, and others for the weaving of silken brocades at Lyons, which latter town soon became the chief centre for the production of silken fabrics in Europe, a position that it still maintains.

The reign of Henri II. (1547-59) was a period of remarkable artistic activity in architecture and the decorative arts, yet even at this period the rich fabrics that necessarily formed a part of the religious, civic, and social life were still largely of Italian production.

In 1589 Henri IV. founded the Royal carpet and tapestry factory of the Savonnerie; for it is recorded that an ordinance was granted to Pierre du Pont, for the making of carpets and other works from the East, in gold, silver, silk, and wool, for eighteen years. His apprentices, one hundred in number, were lodged in the Maison de la Savonnerie et Chaillot.



EARLY FRENCH BROCATELLES.

XVII Century.

PERIOD OF LOUIS XIII

Henri also housed the weavers Lorent and Dubourg in the Louvre; and a number of Flemish weavers, under the direction of Marco de Commans and François de la Planche, produced tapestry in the old workshops at Paris formed by Jean Gobelins in the 15th century.

In Lyons the industry was carried on by the weavers and their families in their own homes, the finished fabric being returned to the master who supplied the materials and the design. Such conditions of production also prevailed at Spitalfields, where many of the finest silken brocades of the 18th century were produced.

But few patterned fabrics of French origin can be traced to the later Gothic period, or the early days of the Renaissance; doubtless many were produced, but as most of the skilled weavers had received their training in Northern Italy, the early Lyonese figured fabrics naturally followed the Italian traditional designs and technique of weaving, hence it is frequently difficult to differentiate between the early French and the contemporary Italian fabrics.

On plate 56 are two representative examples of the period of Francis I., showing the same dignified massing and distribution of pattern that is so characteristic a feature of the early Florentine fabrics.

In the time of Louis XIII. (1610-43) the French patterned fabrics began to be distinguished by symmetrical ornamental forms, frequently with some indication of lace effects, doubtless suggested by the early laces of Milan, Venice, and Genoa, which had attained considerable renown during the 16th century, and had exercised some influence upon the north Italian woven fabrics of the early 17th century; but in France, after the middle of the 17th century, the production of such beautiful laces as Point d'Alençon, Argentan, Chantilly, and Valenciennes, with their magnificent technical and artistic qualities, necessarily exercised a further and more lasting influence upon the silken brocades of Lyons.

During the long reign of Louis XIV. (1643-1715), with its princely patronage of the arts, the Lyons weaving industry doubtless received considerable attention and financial support from the minister Colbert, and possibly many suggestions or designs from Charles le Brun, a talented painter and designer, who had control of the decorations of the Royal palaces, and was also the director of the "Gobelins." Jean Marot (died 1677) and Jean le Pautre (died 1682) designed much for the Court of Louis XIV., and these artists doubtless contributed many designs for the velvets and brocades of Lyons.

The examples on plates 56 and 59, with their symmetrical planning and lace-like details, are characteristic examples of the



SPANISH SATIN BROCADE.

Late XVII Century

A floral and lace-like design in white, blue, and green on a red ground.



SPANISH OR FRENCH SILK BROCADE. *Late XVII Century.*

A rich blue silk with design in gold, brown, and silver thread.



Crimson ground ; pale yellow ornament outlined in green and yellow ;
some pale blue.



FRENCH OR ITALIAN SILK BROCADES.

Late XVII Century.



FRENCH SILK DAMASKS.

End of XVII Century.



FRENCH SILK BROCADE.

Early XVIII Century.

Flowers and fruit in bright hues of purple, green, blue, and red on a light brown ground.



ITALIAN SILK BROCADE.

Early XVIII Century.

Light green, silver, and gold thread on a blue ground.



FRENCH SILK BROCADE.

Early XVIII Century.

Flowers in brown, green, and silver gilt on a cream background.

THE ROUEN POTTERS

fabrics of the later 17th century; they may, however, be of Italian origin. Fig. 39 is also a fine and representative example.

It was about this period (1673) that the Rouen potters, under Louis Poterat, elaborated and produced their beautiful scallop decoration termed *à lambrequins* and *à broderies*, a type of decoration suggestive of Chinese patterning and contemporary French brocades. Two beautiful damasks of this period are given on plate 60, corresponding in type to the patterning of the Rouen pottery.

No. 1, on plate 64, is from an interesting brocade of this period, with a lace stripe and a free rendering of floral details which show a marked contrast to the formal patterning of the typical contemporary Spanish fabrics on the same plate.

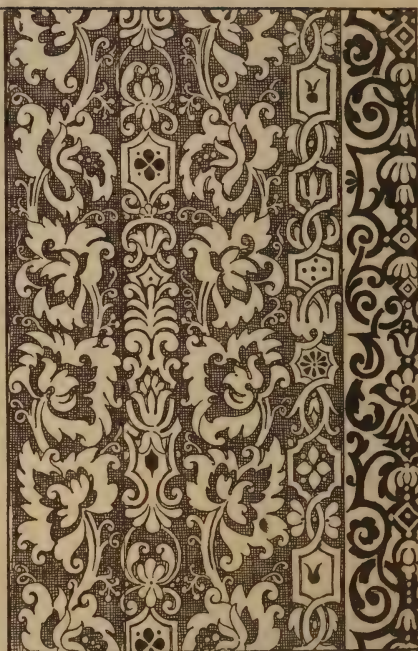
Plates 57 and 58 show the close similarity between French



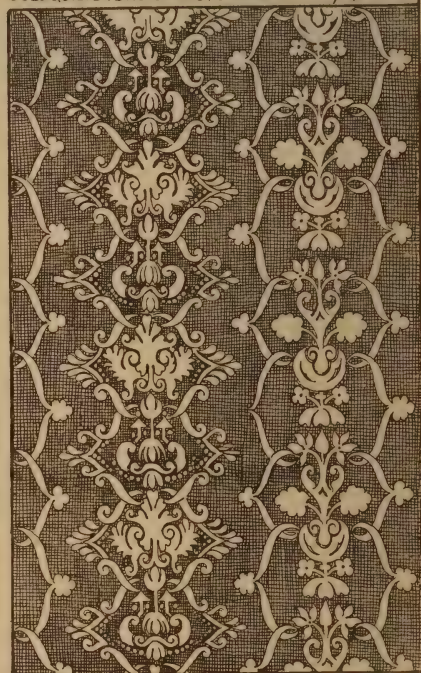
FIG. 39.—Woven Silk Fabric. LYONS.



SILK BROCADE.
LYONS 17th Century.



GOLD & SILVER BROCADES. SPANISH 17th CENTURY.



Yellow ground; red and green flowers.

FRENCH & SPANISH BROCADES.

Late XVII Century.



DESIGN FOR VELVET
by Daniel Marot.

End of XVII Century.

THE ROCAILLE TYPE OF ORNAMENT

and Spanish design; plate 62 shows the marked similarity of design in a contemporary Italian fabric.

Such distinctive patterns as those designed by the Huguenot, Daniel Marot (1655-1720), are characteristic of the later fabrics of the period of Louis Quatorze. Marot designed much in France until the revocation of the Edict of Nantes (1685). His designs (plate 65), though showing some caprice in arrangement, retained some

of the Eastern traditions in the decorative treatment of floral forms. Pierre, son of Jean le Pautre, and Jean Bérain were also prolific designers of this period, and they probably contributed many designs for patterned fabrics corresponding to their schemes of decoration.

With the death of Louis XIV. the arts entered upon a new phase under the regency of Philip, Duke of Orleans (1715-23). Among a number of decorative artists, three, François Cuvilliès, Jean Aurèle Meissonnier, and Antoine Watteau, exercised much influence upon the decorative arts of this period. Watteau, who was a talented artist of pastoral figure subjects, designed much decorative work of a delicate and graceful character reminiscent of Pompeian painting. Cuvilliès and Meissonnier, however, introduced and largely used the *Rocaille* type of ornament, which remained so characteristic a feature of the decorative arts during the regency, and right through the reign of Louis XV. (1715-74). During this period, the *rocaille*, or rock and shell work (fig. 40), with its restlessness of line



FIG. 40.—Relief Ornament.
Rocaille Period.

and mass, was used chiefly for relief and painted ornament, and its influence was but little felt in the patterning of woven fabrics; but the naturalistic treatment of flowers, which was also associated with the *rocaille* relief work, was in brocaded fabrics elaborated and carried to an extraordinary degree of technical skill in pictorial representation, having a brilliancy and playfulness of treatment and colour, but lacking the reticence of design, beauty of contour and mass, and the perfect distribution of the Eastern and the earlier Lyonesse patterns. Plate 68 is a representative example of the earlier flowered fabrics,



Cream silk damask, flowers in shades of dark red, blue, and green.
FRENCH OR SPANISH SILK BROCADE.



White silk pattern in blue, brown, and silver-gilt thread.
SPANISH SILK BROCADE. *Middle XVIII Century.*



Sprays of flowers in blue, white, green, and yellow.



Blue, gold, and yellow flowers and bright green foliage on a pink ground, with a faint diaper relief.

FRENCH OR SPANISH SILK BROCADES.

XVIII Century.



FRENCH SILK BROCADE.

Louis Quinze.

REFINEMENT OF DESIGN



FIG. 41.

and the Frontispiece of the later development of Louis Quinze style. Plates 66 and 67 show a rather varied but very typical treatment, chiefly of the rose.

The Lyonese weaver Ringuet was the first to introduce the naturalistic flower into French silk patterns, and the modelling of the floral motives so as to give the effect of light and shadow was the invention of another Lyonese weaver, Jean Revel (1684-1750).

In the period of Louis XVI. (1774-89) natural flowers are less frequently the motive of the pattern, and the forms are treated with a greater degree of refinement and reticence, insistence being laid, as in Eastern design, upon beauty of drawing and perfect distribution of pattern rather than upon the imitative light and shade effects and fancy weavings of the preceding period.

Philippe de Lasalle and Gabriel Trichard were distinguished designers at this time; the design (fig. 41) by Trichard is typical of his refined type of orna-



FRENCH SILK DAMASKS.



Late XVIII Century.



Silk damask in style of Phillip de la Salle: pattern in gold on a crimson ground.

FRENCH SILK DAMASK.



SILK DAMASK,
probably SPANISH.

Late XVIII Century.



GREEN VELVET ("VELOURS CISELÉ") DATE 1812.



SILK BROCADE, YELLOW & WHITE ON BLUE GROUND, DATE 1811.



BORDERS IN BROCADED SILKS, IN GOLD & CRIMSON.
WOVEN BY M.C. PERNON IN 1805 FOR THE PALACE OF SAINT-CLOUD.

WOVEN SILK FABRICS.

The Empire Period.

THE EMPIRE PERIOD

mentation, corresponding to the beautiful contemporary furniture by Riesener, Roentgen, and Ochen, and the decorations, such as that for Marie Antoinette's boudoir at Fontainebleau, by the brothers Rosseau, 1788. To Philippe de Lasalle are due the rustic and amorous fancies that made so strong an appeal to the French aristocracy of the *ancien régime*—the pairs of turtle-doves, the implements of the gardener's and the shepherd's callings, the interlocking rings, the musical instruments, and other motives of this order.

On plates 69 and 70 are two good representative examples of the patterning of the silken fabrics, excellent in their material and technique of weaving; and such designs, though frequently small in scale, are refined and distinctive in type. Classical elements are intermingled with flowers, ribbons, and dainty swags symmetrically treated, and are in marked contrast to the caprice and looseness of the designs of the Louis Quinze period. Striped patterns were prevalent, the patterning consisting of a delicate rendering of natural flowers and foliage. The printed fabric given on plate 98 is a good illustration of the refined striped patterns of this period known as Louis Seize.

During the Revolution in France, the weavers and their industry suffered considerably, especially at Lyons. Under the rule of the Directory (1795-99) there was a revival, the style of the period of Louis XVI. becoming more and more tempered by the introduction of motives drawn from classical art—a tendency that was specially fostered by the excavations at Pompeii, newly brought to light. The classicist style reached its apogee under the Empire, when, owing to the patronage of the Court, the weaving industry regained much of its former skill and productive power during the short period 1802-13.

Of this period the chief artists and designers were Charles Percier (1762-1838) and P. L. Fontaine (1762-1853), who in collaboration controlled the chief decorative work, together with the costumes for the state ceremonials. In their work, the classical acanthus, anthemion, and laurel were freely used, with considerable refinement and delicacy, yet lacking in vitality of conception.

Many of the more sumptuous fabrics of this period, the production of the Royal factories at Lyons, are now in the Mobilier National, Paris, and were woven between the years 1805-13 by Messrs. Chiard et Cie; Sériziat et Cie; Bissardon, Bony et Cie; Séguin et Cie; Grand Frères; and M. C. Pernon, and were used to furnish the palaces of Versailles, Fontainebleau, Saint Cloud, Trianon, and the Tuileries.

The patterns of these rich silken damasks, velvets, and brocades



FRENCH SILK TEXTILES.

1795-1804.

Bright green silk damasks, patterns in white.



SPANISH SILK BROCADE.

XVIII Century.

Outer part of white silk brocade quilt; intertwined garlands of flowers and fruits, and devices in blue, red, green, brown, and gold.



Centre design of quilt in Plate 73. Medallion in dark red and gold, surrounded by flowers and foliage in rich gold, blue, red, green, and brown.



FLEMISH LINEN.

XVI Century.

WEAVING INDUSTRY IN FLANDERS

correspond with the decorative details of Percier and Fontaine, showing a preference for diagonal lines, with circular medallions and lozenge-shaped panels; the palm and olive are used as sprays or festoons, together with vases, the Greek honeysuckle, and the acanthus, symmetrically arranged.

On plate 71 are representative examples from the Mobilier National of fabrics that passed direct from the looms of Lyons into the national store.

No. 1, a hanging of green velvet, was woven by Messrs. Bissardon, Bony et Cie, in the years 1811-12, for the "Cabinet de repos" of the Empress Marie-Louise in the Palace of Versailles; No. 2, a brocade hanging, woven by Messrs. Séguin et Cie, between the years 1811-13, for the Palace of Versailles, and subsequently used in the "Salon des Fleurs" in the Palace of Fontainebleau.

The two brocaded borders on the same plate are also typical examples of the classical tendency of the Empire style in the use of the acanthus as the motive of patterning.

Plate 72 also gives two characteristic textiles of the Directoire and Consulate periods respectively.

The Empire style outlasted the downfall of Napoleon, and, indeed, became exaggerated. It was succeeded, under Louis Philippe (1830-48), by the Romanticist style. Later, Japan, Persia, and other countries have supplied fresh motives to the Lyonese weavers.

Plates 73 and 74 are portions of a large and splendid silk quilt of Spanish origin, and show that late 18th-century design had much in common in several countries.

Throughout the 18th century Spain produced a large number of silk damasks and brocades in the French style, which are often confused by connoisseurs with the products of the Lyonese looms. The colour contrasts of the Spanish stuffs are generally cruder than those of their French prototypes, and the silk is shaggier and has a dimmer lustre.

FLEMISH

The weaving industry of Flanders is inseparably associated with the history, wealth, and commercial activity of many cities and communities, such as Bruges, Ghent, Tournay, Louvain, Courtrai, Oudenarde, and Brussels. At Arras and Brussels were produced those magnificent tapestries for the Court of Burgundy, and for Pope Leo X.

Bruges was famous for its silks and velvets, which in design, materials, and technical qualities of weaving were unsurpassed even

LINEN DAMASKS

by those of Florence ; yet, having similar characteristics of material and patterning, it is difficult to differentiate between those of Italy and Flanders. Probably many of the more sumptuous velvets now called Florentine were produced at Bruges.

Many of the Flemish towns were actively engaged in the production of splendid woollen fabrics, an industry that must have added considerably to their civic importance and commercial prosperity. Frequently these patterns, though in wool, do not differ much from the conventional pomegranates and flowers found on the mixed fabrics of Italy.

It was, however, in the production of fine linen damasks that the Flemish weaver achieved the greatest distinction of material and design ; Ghent, Courtrai, Oudenarde, and Ypres were early associated with this industry.

In 1400 the weavers of Ghent numbered 40,000, and in Ypres 4000 looms were in active use, but it was in the 16th century that the finest linen patterned fabrics were produced.

These white linen damasks were famous for their excellent qualities of material and their distinctive heraldic patterning, and were produced not only for the Flemish market, but also in response to a large demand from England.

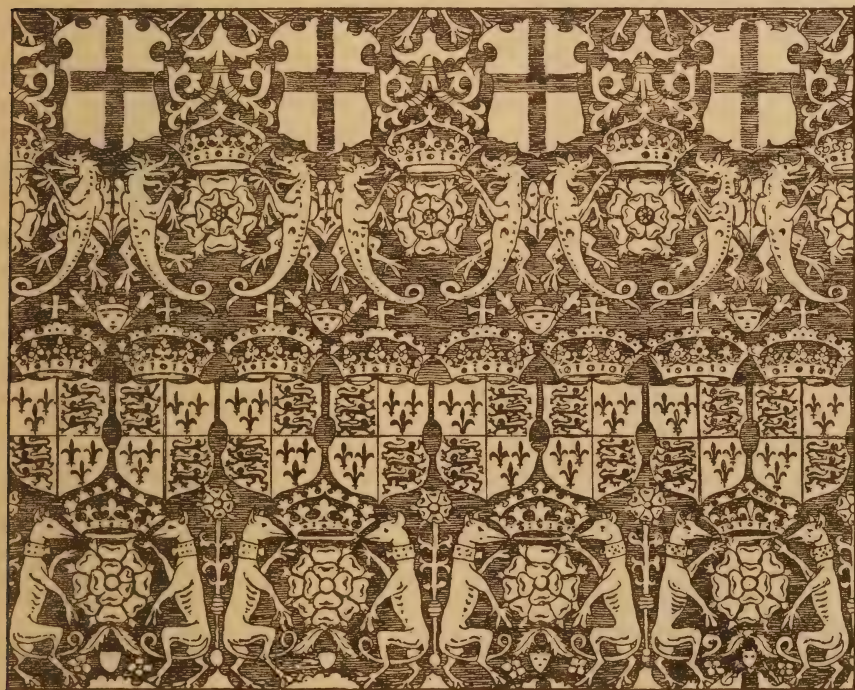
Plate 75 is an early type of the heraldic pattern, which later became so pronounced a feature of the Flemish linens ; the boldly designed arms and supporters of Henry VII. clearly indicate the appreciation and demand in England for such a *tour de force* of Flemish weaving, needing some 5000 warp, and 12,000 weft threads, to form the pattern.

The Renaissance borders of this example show the wide influence that the Italian designs of the Flemish tapestries had upon the linen fabrics of that period.

The heraldry is, however, a distinctive feature of those linen damasks. On plate 76 are two representative examples ; the shields of Saint George, and of England and France, together with the Tudor rose, form good ornamental masses, enhanced by the vigorous drawing of the dragon and hound supporters, which are reminiscent of the Sicilian treatment.

These heraldic fabrics are admirable examples of significant patterning, designed and woven for a specific purpose, and they show a high degree of technical skill, power, and expression of design, and commercial and industrial enterprise.

Many linen fabrics were also produced during the 17th and 18th centuries in Germany, the designs of which consist of figures, foliage, and architecture woven in red and white, or blue and white.



FLEMISH LINEN DAMASKS.

XVI Century.

IRISH LINEN

Later Flemish linens also show a similar treatment of figures, usually riders and huntsmen, combined with architecture and foliage. Many smaller patterned linens were produced in Flanders, having a diaper of flowers or emblems.

Diaper is a term frequently used to define a white damask fabric having a formal patterning.

In Chaucer's "Squire of Low Degree," the King of Hungary promises his daughter a chair or carriage that—

"Shall be covered wyth velvette reede
And cloths of fine golde at about your heade,
Wyth damaske whyte and azure blewe,
Well dyaperd with lylles newe."

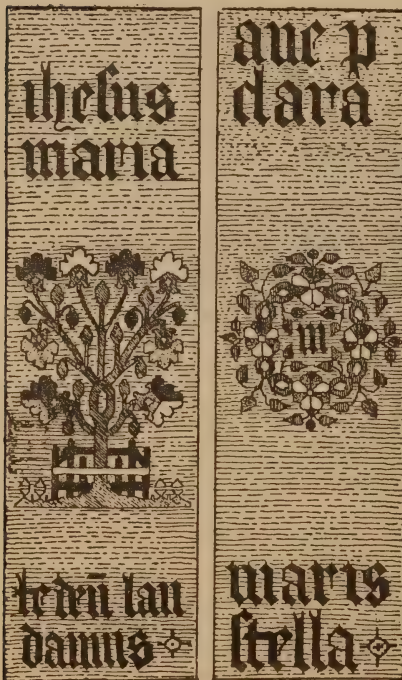
An illustration of a fine piece of Irish linen is given on plate 78.

This splendid fabric, woven at Lisburn in Ireland, equals the finest of Flemish linens in material and texture; the design is, however, distinctly French in character.

Cologne was also a great weaving centre, producing quantities of narrow cloths of gold, called Orphrey webs; a class of fabric having woven inscriptions and figures of saints enriched with embroidery.

Some narrow bands of cyprus gold, with inscriptions and floral forms, were the work of the Guild of Embroiderers and Weavers of Cologne, and were extensively produced during the 15th and 16th centuries; fig. 42 and plate 77 are typical examples of these interesting fabrics.

Orphrey webs were also produced at Venice and Florence, having distinctive characteristics of colour and technique of weaving.



COLOGNE WEAVINGS. XV Century.

FIG. 42.—Cyprus gold thread ground; green stems and leaves, scarlet and white ground; blue lettering.

ing. Those of Venice are usually woven in gold or yellow silk upon a crimson ground; while the Florentine webs had white silk introduced in the faces of the figures.



COLOGNE WEAVINGS.

XV Century.

Four typical examples of the Orphrey webs, woven in red, blue, and green silk and gilt thread,



IRISH LINEN DAMASK,

XVIII Century.

ENGLISH FABRICS

ENGLISH

England early had a reputation for embroidery and the production of woven fabrics in which linen and wool were the chief materials used. The patterns, when not in stripes, would doubtless consist of a repetition of small and simple geometrical figures, such as is shown on the 12th century loom given in fig. 4, page 13.

In 1246, the embroidered orphreys of the English clergy in Rome excited the admiration of Pope Innocent IV., who, finding they were worked in England, is said to have exclaimed, "Truly England is our garden of delight, in sooth it is a well inexhaustible, and where there is great abundance, from hence much may be extracted."

In the 14th century mention is made of the fine woollen cloths of Bath, Worcester, and Norwich; at that period these towns had reached a considerable degree of importance in the production of textile fabrics.

There is no doubt that the Flemish weavers took a very important part in the commercial life of England, and in the industrial activities of the early English looms, for in 1343 Edward III. granted "protection to John de Bruyn, burgess of Ghent, now making stay in Abyndon for the making of woollen cloths." The king also granted "protection to John Kemp of Flanders for the making of cloths." He also invited Flemish fullers and dyers to come and settle in England.

Other towns associated with the weaving industry were Ailesham in Lincolnshire, where, during the 14th century, excellent linens were made; and Worsted in Norfolk, where a fine woollen of a peculiar hard quality was produced and used extensively for church vestments and bed covering.

Figured fabrics of wool were also frequently used for hangings, for the wardrobe account of Edward II. contains this item:—

"To a mercer of London for a green hanging of wool, woven with figures of Kings and Earls upon it, for the king's service in his hall on solemn feasts in London."

In 1592 the Earl of Arundel willed to his wife "the hangings of the Hall which was lately made in London of blue tapestry, with red roses and the arms of my son."

Silk weaving was established in London and Norwich during the reign of Edward III. by Queen Phillipa of Hainault, who knew something of the advantages to be derived from this industry, and in 1455 we hear of silk throwing and weaving by a company of women called *silk women*. They petitioned Parliament against the competition of the Lombards, and an Act was passed prohibiting the import of laces, ribbons, and such narrow fabrics as were manufactured by them.



SPITALFIELDS SILK BROCADE.

Early XVIII Century.

Protection was granted to the English silk industry by Edward IV., who passed an Act prohibiting the importation of wrought silks.

Queen Elizabeth granted a charter in 1564 to the Dutch and Walloon settlers in Norwich, where 300 of them were established in the weaving of damask and striped and flowered silks.

The silk industry first became of importance during the reign of James I., when some attempts were made to establish the art of sericulture in various parts of the country, but without success.

The importation of French woven silks was forbidden by statute in 1697, and it was also enacted in 1701 that the importation of silk fabrics from Persia, India, and China should cease. These laws remained in force for more than a century.

SILK WEAVING

In 1685 the revocation of the Edict of Nantes caused some 50,000 refugees, many of them skilled weavers, to fly from France, and they formed settlements at Canterbury, Norwich, Braintree in Essex, and London.

The London settlement, known as Spitalfields, with its 3500 French refugees, soon became the chief centre in Europe for the production of fine silken damasks and brocades. Its industrial and artistic activity lasted up to 1824, when there were 17,000 looms employing 50,000 hands in weaving and its allied crafts.

In the reign of George II. (1732) a grant of £14,000 was given to Sir Thomas Lombe to erect three Italian machines for gauzing silk, and granted him for fourteen years the sole privilege of working this machine which would do as much as fifty hands would do before. These machines were erected upon the river Derwent and were worked by water power.

Towards the end of the 18th century at Norwich, which up to that time had produced splendid patterned silks, Colonel Harvey, a manufacturer, commenced the weaving of beautiful figured shawls in silk and wool similar to those of cashmere and almost equalling them in the beauty of colour, and in technical qualities of weaving.

Another centre for the weaving of these shawls was Paisley, where from the 15th century linens and home-spun woollens had been produced. In 1760 the weaving of silk and fine muslins was introduced, an industry that continued up to 1820 when the weaving of woollen shawls was commenced. The patterns have the characteristic pine ornament which is so pronounced a feature of the famous cashmere shawls; woven on the old draw looms, these Paisley shawls have remarkable technical qualities of weaving combined with beauty of colour.

This weaving industry at Paisley had a remarkably successful, though short, period of artistic activity, lasting from 1820 to 1870, when, owing to a change of fashion, the production of these shawls ceased, to be succeeded by the spinning of thread.

The weavers of Spitalfields, like those of Lyons, produced the silken fabrics in their own homes, from materials and designs supplied to them by the master weavers. Such a condition of labour existed during the same period among the silk weavers of Lancashire and Cheshire.

An interesting and instructive pattern book for the Spitalfields weaving industry is now in the Victoria and Albert Museum, in which are many original designs for silk brocades, some by French, and others by English designers, and dated from 1715 to 1754.

The names of the following designers frequently occur: Mr.

SPITALFIELDS WEAVING INDUSTRY

Vernon, Palmer, Vauteir, M. Sabilier, Carr, Gulin, and Anna Maria Garthwaite.

Although these designs may not all have been woven, they afford clear evidence of the type of design that was prevalent during the most prosperous period of the Spitalfields production.

Plate 79, dated 1728, is from an early design in this pattern book, and is identical with others signed "before I came to London." This, and the insistence of the lace effects similar to the Lyons fabrics, shows it to be the work of a Frenchman.

On plate 80 are some interesting examples of the middle period of the Spitalfields industry. No. 1 is a representative example by Palmer and Vauteir (1749) of a striped pattern; similar to many produced at this time.

Late designs (1752) by Sabilier, No. 3 on the same plate and No. 1 on plate 82, show the later development of Spitalfields patterning; the damask design by Vauteir (plate 81, 1) is similar.

The pattern by Palmer and Vauteir (plate 82, 2) and the anonymous design shown on plate 81, 2, show graceful floral treatment of a more naturalistic type.

Judging from the available materials associated with the Spitalfields weaving industry, we must conclude that the designer and weaver, like their contemporary craftsmen in Lyons, relied more on numerous or fancy weaves and textures, than upon any distinctive beauty or nobility of design, hence the primary difference between the Eastern and early European patterned fabrics, and the later ones of Lyons and Spitalfields.

In Eastern and early European patterning insistence is laid upon the beauty of detail, harmony of line and mass, and the perfect distribution and significance of the ornament; while in the later European fabrics, such essentials were considered to be of secondary importance, stress being laid primarily on the number of weavings or textures to interpret the realistic rendering of floral forms.

Plate 83 shows a late 18th-century English silk brocade, which may have formed part of the Prince's furnishings at Carlton House. ✓

A sidelight is thrown on the desire of society ladies for novelty in dress fabrics during the reign of George III., by Horace Walpole, who relates that two great ladies prevailed on William Kent, the architect and painter, to design their birthday gowns. "The one he dressed in a petticoat decorated with the five orders of Architecture, the other like a bronze, in a copper-coloured satin with ornaments of gold."

These patterns were probably embroidered and not woven.



SPITALFIELDS SILK BROCADES. *XVIII Century.*

1. Striped pattern in sepia wash, by Palmer and Vauteir, 1749.
- 2 "A Tissue" designed by Anna Maria Garthwaite. Sepia wash on a white ground.
- 3 "A Tissue," by Sabilier, 1752, white wash on purple ground.



SPITALFIELDS SILK BROCADES.

XVIII Century.

1. "A Damask," by Vauteir, in purple on white.
2. A pattern, dated 1725, "by different hands." Flowers and foliage in purple, blue, green, scarlet, and brown, on white ground.



SPITALFIELDS SILK BROCADES.

XVIII Century.

1. Design by Sabilier, in sepia and white.
2. Flowers in blue, green, scarlet, and brown, by Palmer and Vauteir.



SPITALFIELDS SILK BROCADE.

About 1790.

Probably from Carlton House.
Red ground; design in pink, gold, and white.

VIII

THE PRINTED PATTERN

THE process of printing, compared with that of weaving a pattern, is comparatively simple, rapid, and economical.

Printed fabrics are of two classes—(a) block printed; (b) machine printed.

Block printing is the earliest and the most universal, and is still used extensively both in the East, and also in Europe, when quality and breadth of colour are required, or when the run or length of a specific pattern is not sufficient to incur the cost of engraving the number of rollers required.

The engraved blocks of wood vary in size and shape according to the scale and detail of the pattern; and also in relief, which varies, from $\frac{1}{8}$ to $\frac{1}{2}$ inch; where fine details or delicate lines are required, brass strips are frequently used. The metal strip is also used to define the boundary of broad masses of ornament made up of thick felt.



FIG. 43.—Indian Wood Block.

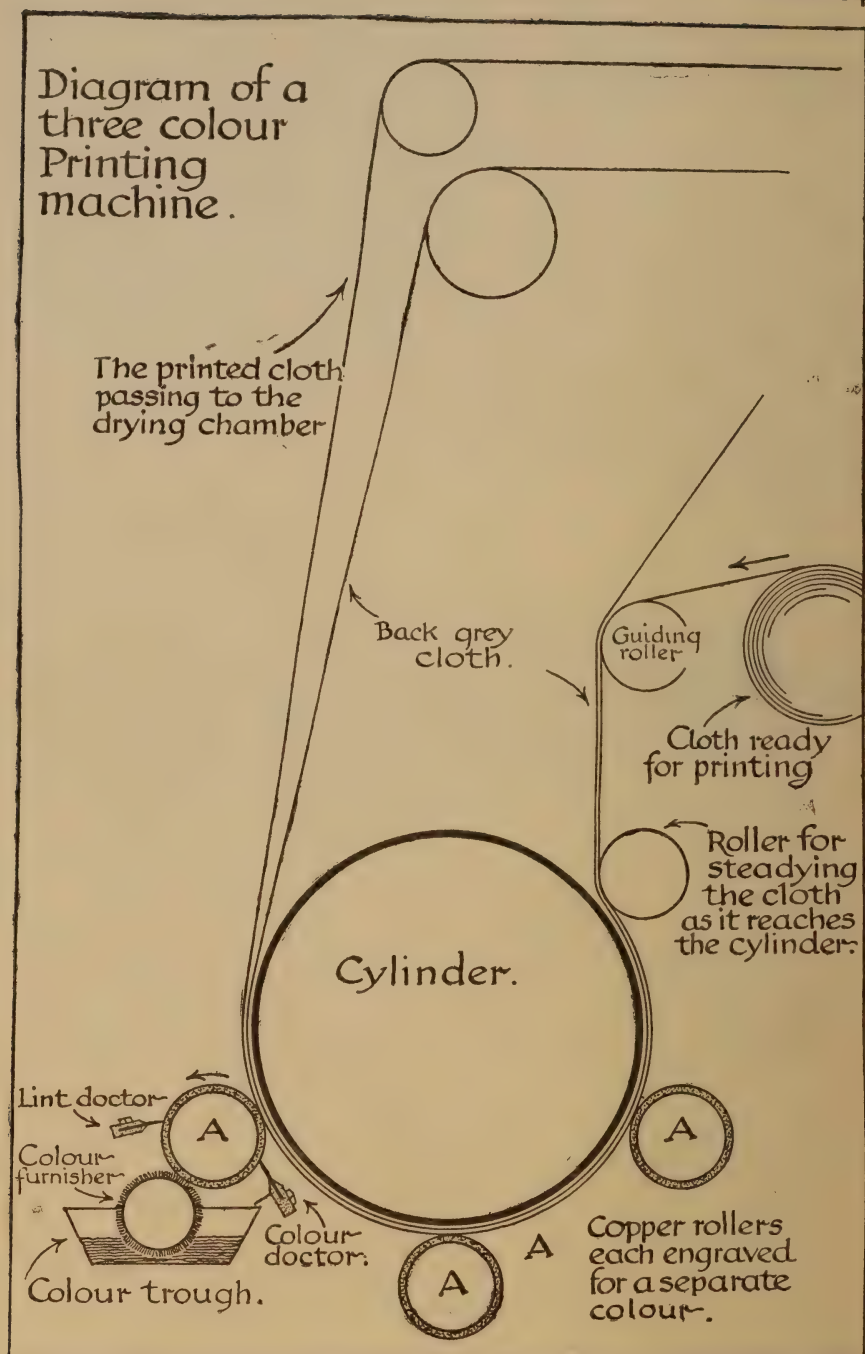


FIG. 44.—English Wood Block.

Fig. 43 shows a small Indian block with a pattern of symmetrical ogival bands. Fig. 44 gives the back of an English block showing the *clutch* for handling the block.

In printing, the block is charged with colour by being lightly pressed upon a leather sieve or cloth covered with the requisite amount of colour, which is then transferred by pressure on to the fabric.

Machine or roller printing, with its accuracy and delicacy of engraving and printing simultaneously in various colours, and its



MACHINE PRINTING

rapidity of production, is totally different in technique from block printing. Plate 84 gives an explanatory diagram of a modern three-colour printing machine; each of the engraved pattern rollers (A) receives the requisite amount of colour by contact with the colour roller or furnisher, which revolves in its colour trough or tray.

The surface of the engraved roller after receiving its colour is scraped quite clear, except the sunk or engraved portion, by the steel *colour doctor*; the coloured pattern is then transferred by considerable pressure upon the soft fabric as it revolves with the large cylinder.

Where the position of the rollers will permit, a *lint doctor* is placed in contact with the pattern roller after it leaves the cloth, to gather up any lint before the roller touches the furnisher again.

The number of rollers and the size of the cylinder are necessarily determined by the number of colours required to produce the pattern; they may range from one to twenty. The scale of the design is determined by the width of the fabric and the circumference of the pattern rollers, which are nominally 16 inches. These

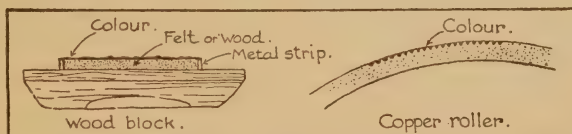


FIG. 45.—Colour Printing.

rollers, however, are frequently reduced in course of time to 15 inches, owing to the necessity for turning the rollers down when they are required for other patterns.

The size of the pattern repeats will therefore be 16", 8", 4", 15", 7½", 5", 3¾", 3", and 2½". The larger the pattern, and the more numerous the colours, the greater is the cost of production.

Where larger patterns are required, or where the quantity of a specific design is insufficient to repay the cost of engraving a large number of rollers, the printer then has recourse to block printing.

It is perhaps singular that the oldest method of textile printing, which is with wood blocks, should be still in use side by side with the modern machine with its accuracy of register and rapidity of production. This is largely due to the *quality* of colour obtainable by the use of the block, especially in large and bold patterns: by *quality* is meant the infinite variations of tone and hue of the colour when it is impressed on the cloth.

The annexed diagram (fig. 45) will doubtless explain the differences in the resulting colour by the two processes.

The block receives the required amount of colour by direct

BLOCK PRINTING

contact, hence the colour is full and varied in its *quantity*; while on the engraved roller the design, however large in mass, must be engraved in lines in order to retain the colour as the roller passes under the colour doctor.

In block printing there is, of course, an irregularity of register when many blocks are used which undoubtedly gives variety and interest to the pattern.

IX

DYED AND PRINTED FABRICS

DYED, stamped, or printed patterns without doubt preceded those woven by the shuttle, and although few examples exist of an earlier date than the 4th century A.D., sufficient evidence is afforded by the descriptive accounts of the early historians to show the extensive use of dyed and printed fabrics.

In the Egyptian tombs of the early dynasties many fine linen fabrics have been found, but few patterned ones, but upon the walls are many paintings of figures having costumes enriched with patterning, which, to judge from the repetition of its details, was no doubt derived from an original stamped or printed fabric.

Some interesting examples of early patterned fabrics, doubtless from a printed original, are represented on the walls of a 12th dynasty tomb at Beni

Hasan (B.C. 2500). Four of these patterns are shown in fig. 46: the star diaper is from the dress of Hotept, wife of Amenemhat, and the chevrons and frets are from the costumes of their son Chnemhotep; but the earliest representations of patterned fabrics extant are found in the wall paintings of the 3rd dynasty, recently discovered.

These show hangings patterned with stars and chevrons, in

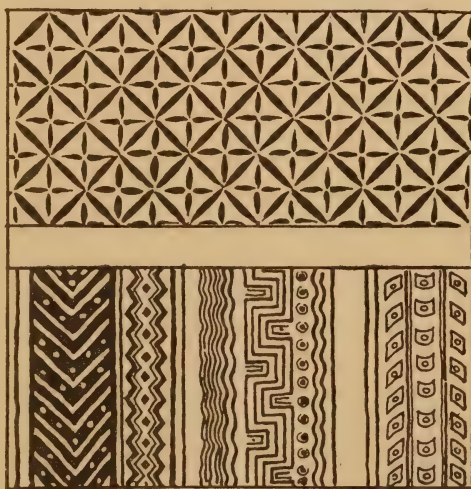


FIG. 46.—Early Egyptian Patterns.

THE DYEING OF FABRICS

blue, brown, and amber ; and the original fabrics, which the painting depicts, were probably dyed in the ancient manner described by Pliny (below).

The dyeing of fabrics was carried to a high degree of achievement at an early date in Egypt and Asia. Pliny speaks of "the Egyptian taking white cloths and applying to them certain drugs, they are then put into a caldron of some colouring matter which gives a variety of colours to the fabric."

The textile fabrics of the Sidonians and the purple cloths of the Tyrians were celebrated for their richness and beauty of colour.

The Phœnician purple was not a single colour, but a generic name for all shades of purple and scarlet. The dye was obtained from the shell-fish *Murex trunculus* and the *Murex brandaris*, both of which were plentiful in the Mediterranean. At Sidon the *débris* of shells left by the ancient dyers may still be seen.

This famous Tyrian purple was greatly esteemed by the Romans. Its cost was great, as one pound of wool dyed with this purple was worth about £36, and when woven into cloth was worn only by those in high positions.

India was probably the first country to develop the full resources of dyeing. The early dyers were familiar with the madders, nutgalls, blue and green vitriol, and indigo, which were so extensively used in the dyeing of fabrics.

The Chinese also made an extensive and skilful use of the art of dyeing. Marco Polo, in his description of Kanbalu (Peking), says : "Indigo also of an excellent quality, and in large quantities, is made here. They procure it from an herbaceous plant, which is taken up by the roots and put into tubs of water, where it is suffered to remain until it rots, when they press out the juice ; this on being exposed to the sun, and evaporated, leaves a kind of paste which is cut into small pieces of the form which we see it brought to us."

In Europe, Florence was the chief city during the medieval period for the dyeing of beautiful fabrics. It is recorded that in the 14th century two hundred dye-works were in active operation in Florence.

Indigo was rarely used in Europe prior to the 17th century, when the Dutch and Portuguese imported it from India. Its introduction was strongly opposed by the growers of woad, which up to that period had been the chief material for a blue dye in Europe.

In the reign of Elizabeth, a law was passed forbidding the use of indigo as a dye.

The discovery of America added considerably to the pallet of

PRINTING IN COLOURS

the dyer; such materials as logwood, cochineal, and brazil-wood being introduced into Europe.

Coal-tar colours were discovered in the 19th century. In 1834 Runge produced kyanol, and in 1856 W. H. Perkin introduced the first aniline colour, a mauve; this was followed two years later by a magenta, discovered by R. W. Hoffman, whose name is largely associated with naphthalene colours of which there is so wide a range. The alizarine colours were introduced by Graeche and Liebermann in 1868. Alizarine has now entirely superseded the madder which was so largely used for Turkey reds.

There are several methods of direct printing in colours upon fabrics: first, those which are at once fixed by the steaming process; second, those in which the colours are produced either by first printing with a mordant, such as an acetate of alumina, then fixing and dyeing the cloth in a bath of colouring matter; or the cloth is first dyed all over, and the pattern is produced by the discharging process, or a resist is printed on the cloth, which is then dyed. White or coloured patterns may thus be produced upon the coloured ground. For instance, upon cloth dyed with indigo, the pattern is printed with an alkaline chromate. It is then passed through a hot solution of sulphuric and oxalic acid, which discharges the indigo dye from the pattern. The same effect is produced upon Turkey red by printing with a tartaric acid paste; the cloth is then passed through a solution of caustic soda to discharge the red.

The older processes of dyeing are still used extensively in the East, and the beautiful reds from the *kermes*, yellows from *weld*, blues from *indigo* and *woad*, and browns from the *walnut*, give a range of harmonious colour, unapproachable even by the modern scientific dyer's pallet, with its wide range of colours that have so enlarged the possibilities of colour printing; but as yet, they have not exceeded the beauty, quality, and the durability of the older dye-stuffs.

An early process of producing a pattern upon a coloured ground was by covering portions of the fabric with clay or wax as a resist, or by tying small portions of the cloth with thread before being dipped in the dye-vat.

India at an early date perfected a process known as *bhandana* work, or "tye and dye process"—so called from the Hindu verb *bhanda*, "to tie." The pattern having been drawn upon the fabric, it is passed on to the knotter, who follows the design by pulling up the cloth into minute portions and tying with thread, which successfully resists the action of the dye when dipped in the vat.

This *bhandana* work is also used in the production of *chine silks*



JAVANESE BATIK.

XVIII Century.

Cream-coloured ground ; blue and brown ornament.



JAVANESE BATIK.

XIX Century.

Loin cloth (*sarung*) of cotton, with resist printing in black, white, and blue.



GERMAN PRINTED LINENS.

XIII Century.

BATIKS

or *shadow silks*, the warp, and in some cases, the weft, being dyed with a pattern before it is woven.

English *chiné* work is produced by block printing on the warp before weaving. Owing to the technical character of the process, there is an indistinctness and softness of the pattern, hence the term *shadow silk*.

The natives of Java are especially expert in the use of a fluid wax as a resist for the production of patterned fabrics. The work is done chiefly by women, who use a bamboo or metal pipe with a small reservoir, called a *tjanting*, from which runs liquid wax to protect the material in the parts not required to be dyed. The cloth is then dyed, usually in a blue shade, and further designs can be traced on it, and, after wax protection, these can be dyed in other colours. The whole process is often of the most elaborate kind, and calls for a large number of stages.

These patterned cloths or *batiks*, as they are termed, are distinctive in type, and have reached a considerable degree of excellence in design and dyeing. Owing to the slight cracking of the wax, the design frequently shows a network of fine lines due to the penetration of the dye.

The colours of these *batiks* are usually yellow or amber, brown, blue, and black. Plate 85, although showing a Chinese influence, is a representative example of a Javanese *batik*. Plate 86 is also a characteristic specimen. These examples are from a finely executed modern *batik*, showing the delicate lines and graded effects that are possible by the use of liquid wax in the hands of the skilful Javanese women.

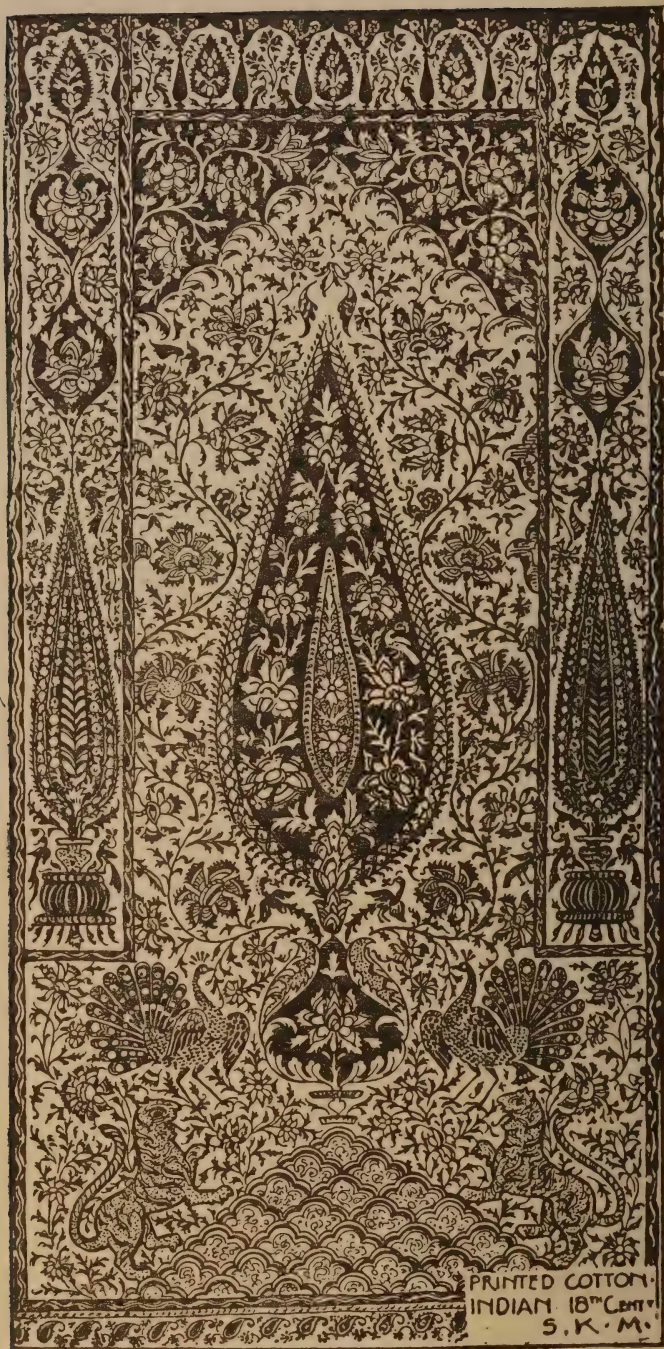
Many imitation *batiks* are now printed by machinery in Manchester and exported to Java.

The earliest known examples of printed fabrics have been found in the Coptic tombs at Panopolis, of the 9th century A.D., one of which has a blue ground and a pattern of white rosettes within a trellis. Numerous examples are printed with figure subjects, and were doubtless used for hangings in the Greek and Byzantine churches.

Printed fabrics are scarce from this period until the 13th century is reached, when many printed linens and silks were produced in Germany, the pattern being derived from the earlier or contemporary woven fabrics.

No. 1, plate 87, is distinctly Sicilian in character, while No. 2 is evidently from a Byzantine origin. Many of these early patterned fabrics were printed in gold or silver on red, blue, or green grounds.

The Rhenish industry of printed fabrics undoubtedly derived



INDIAN PALAMPORE.

XVIII Century.



PERSIAN PRINTED COVER.

XVIII Century.

Probably printed and partly painted by hand. Colours black, and light and dark shade of blue and red.



INDIAN (MASULIPATAM) CHINTZ.

In the Victoria and Albert Museum, No. 64-1904.

PRINTED FABRICS

considerable impetus from the skill and activity of the wood engravers of the 15th and 16th centuries.

Many of the Rhenish printed fabrics reproduced the distinctive Florentine woven velvets and brocades. Fig. 47, from a printed linen chasuble, is a good example of the freedom of interpretation, due to the process of wood-engraving, in representing the typical woven Florentine radiating flower.

It was in India that the highest achievement in printed fabrics was reached. Unlike the early printed fabrics of Europe, which were usually an attempt to imitate the more costly woven fabrics, the Indian printed pattern was distinctly a creation that arose out of the recognition of the beauty and harmony of selected natural forms in repetition, and their perfect adaptability for the process of printing.

The Kalamkar and Palampore, or calico bed-covers, are fine examples of Indian patterning.

The Kalamkar is a painted fabric, with an outline drawn with a reed pen, the colours being afterwards filled in by hand.

The Palampore is printed from a series of small blocks skilfully arranged to cover the whole surface with a foliated design interspersed with birds and animals. Plate 88 is a representative example of the Indian Palampore. Plate 89, a Persian printed cover, is of very similar design, and plate 90 shows a typical colour scheme.

The Indian designer shows considerable skill and resource in the planning of ornament; floral forms predominate, treated with a decorative convention and, like all Eastern patterning, perfect in proportion and distribution of ornament, and in significance and beauty of detail, together with a frank use of the primary and secondary colours.



FIG. 47.—Italian Artichoke Pattern.

INDIAN PRINTED CALICOES

Representative examples of Indian patterning are given in plates 91-94, which are selected from a fine series of original designs for printed chintzes, now treasured in the Victoria and Albert Museum.

In these examples similar details of floral forms are used, but with different planning of the pattern. Plates 91 and 94 (2) have considerable freedom of arrangement compared with plate 92, which is planned upon a more formal basis of ogival lines; while plate 93 is a well-defined and characteristic leaf, or pine-shape, filled with floral forms, a feature used so frequently in the patterning of the brocades and shawls of India (plates 15, 16).

These examples, although of comparatively late work (18th century), are doubtless fairly representative of medieval patterning in India.

In the 17th century the Dutch and Portuguese manufactured cotton prints directly inspired by those of India.

Indian printed calicoes were imported into England in 1627 by the East India Company; but printed fabrics had been produced as early as 1619 in England, for a patent was granted in that year for the production of stained or printed fabrics, and other patents were granted in 1634 and 1675. These fabrics were chiefly linen, though cotton is mentioned in the patent of 1634; and to protect this English industry, the printed chintzes of India, Persia, and China, which had been freely imported during the middle of the century, were prohibited to be worn in Great Britain. By an Act of Parliament passed in 1700, it was enacted "that all calicoes of China, Persia, or of the East Indies, that are painted, dyed, printed, or stained there, which are, or shall be, imported into this kingdom, shall not be worn, or otherwise used, in Great Britain."

During the 18th century many efforts were made in England for the development of the calico-printing industry, but its progress was retarded by the heavy tax placed upon such fabrics to prevent the inevitable competition with the woollen industry which would ensue.

In 1702 there was an excise tax of 3d. per square yard on all printed calicoes; in 1714 the tax was increased to 6d.; in 1720 a law was passed forbidding the wearing of printed calicoes, this was partially repealed in 1736, when mixed goods were permitted. In 1774 this Act was repealed, but the 3d. tax still remained until 1806, when $\frac{1}{2}$ d. was added; but in 1831 the whole tax was removed, and calico printing rapidly increased in production.

In 1689 the manufacture of *indiennes* was established at Neuchâtel, and the brothers Kocchlin started cloth printing at



DESIGN FOR CHINTZ,
INDIAN.

XVIII Century.

In green, blue, red, and gold.



DESIGN FOR CHINTZ,
INDIAN.

Colours blue, red, and green on white ground.

XVIII Century.



DESIGN FOR CHINTZ,
INDIAN.

XVIII Century.

Colours bright blue, red, and dark green on white.



DESIGNS FOR PRINTED COTTONS,
INDIAN.

XVIII Century.

Colours red and blue on a white ground.



Black and white design on red.

XVIII Century.



Red flowers and light blue foliage on dark purple ground ; light blue bordering.

GERMAN PRINTED COTTONS.



DUTCH PRINTED HANGING.

XVIII Century.

Flowers and foliage in red, light and dark blue, on
white ground.

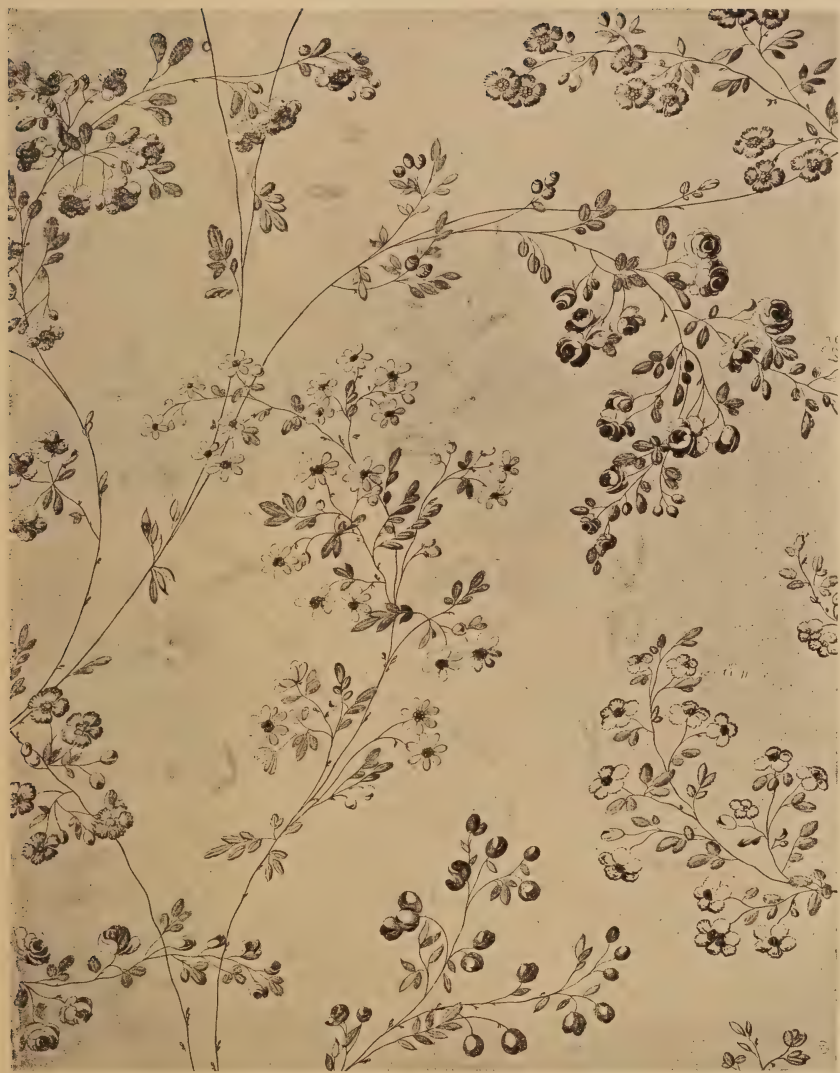


FRENCH PRINTED COTTON HANGING, Red, *Later XVIII Century.*



FRENCH COTTON HANGING. *Late XVIII Century.*

Printed in req. by Oberkampf of Jouy.



DESIGN FOR PRINTED CHINTZ,
ENGLISH.

XVIII Century.

Flowers in blue, red, and yellow, leaves in green.



DESIGN FOR PRINTED CHINTZ,
ENGLISH.

XVIII Century.

Red and blue flowers, green and yellow foliage and stalks.

PRINTING FROM METAL ROLLERS

Mulhouse in 1746, and two years later introduced block printing with the use of mordants. Some English prints are in existence, printed from engraved metal plates, with landscapes and architecture, frequently Chinese in type. They are printed with the name of Collin Woolmers, and the date 1766.

In 1780, almost simultaneously in England and France, printing from metal rollers was introduced: in Lancashire by Bell, a Scotsman; and by a Frenchman named Oberkampf at Jouy, near Paris, which immediately gave a great impetus to the printing of calicoes.

The patterns of all these early printed fabrics were clearly suggested by those of India and China, as may be seen in plate 101; but a little later an endeavour was made, more especially in France, to produce more original work, in line, corresponding to the contemporary engraving upon metal and having pictorial groups of figures and woodland scenery, printed in blue or red. Of the more decorative patterns of this period, that given on plate 97 is a representative example by "I. P. Meillier & C^a de Beautiran." This is a hanging of red cotton, with the pattern reserved in the dyeing. This design, although of Louis XV. period, is an extremely dignified one, having all the finer qualities of the Louis Seize, the reticence and refinement of patterning, and the prevalence of vertical stripes. This design is a fairly large one, the width of the cloth, with its two repeats, being 4 feet 2 inches.

The finest European printed fabrics were undoubtedly those produced by Oberkampf at Jouy, near Versailles, from 1760 to 1843. Many of the Jouy prints were of the pictorial type, but during the reign of Louis XVI. (1774-89), Oberkampf produced many beautiful decorative fabrics, having that daintiness and reticence of design which was so characteristic a feature of the Louis Seize period. Plate 98 is a representative example by Oberkampf.

Contemporary with this period in France (the last quarter of the 18th century), England produced excellent printed chintzes, having floral designs of considerable delicacy in drawing and freedom in planning. Two representative examples are given on plates 99 and 100, taken from a set of original designs for chintzes which are now in the Victoria and Albert Museum. They represent the best period of English naturalistic design.

At the close of the century and the commencement of the next, a considerable quantity of small prints were produced in Switzerland, France, and England, and many of the designs were reminiscent of India and Persia in both pattern and colouring, as in plate 101, No. 2.

GENOESE PRINTED FABRICS

Contemporary English prints were characterised by considerable inventive qualities of design, and refinement of drawing, showing a frequent use of vertical or waved stripes, and a distinct preference for light grounds.

An interesting class of printed fabrics are those variously known as *mezzari* or *meseri*, formerly worn as veils covering the head and shoulders by peasant women of the Genoese territory. These were made of cotton material, imported from Switzerland and other countries of Europe, and printed in Italy from wood blocks, as many as eighty being used for a single piece. The patterns were inspired by those of the *indiennes*, which were brought over in the ships of the East India Companies. The two principal names in connection with this industry are those of Michele Speich, a Swiss craftsman from Glarus, and of his cousin Luigi Testori. The former began the printing of *mezzari* between Conegliano and Campi in the neighbourhood of Genoa in the year 1787. Speich was succeeded in 1830 by Testori, who worked at San Pier d'Arena, near Conegliano. Testori inherited his predecessor's wood blocks, and reprinted all or most of his designs; his colours, however, are said to be less brilliant and solid than those of Speich's fabrics. The works of Testori closed down shortly after the middle of the 19th century.

The tradition of brightly coloured naturalistic flowers extended well on into the 19th century in several countries. Indeed, some of the kerchiefs worn by Italian peasant women, of brilliant flowers on a dark ground, seem to show that the influence of this style has not entirely died out.

During the 17th and 18th centuries the Japanese craftsman reached a high degree of achievement in colour printing on paper from wood blocks; yet, singularly, this process was rarely used for the printing of fabrics, which was done almost entirely by the aid of paper stencils. Plates 103 and 104 are representative of these stencilled fabrics.



Predominant colours red and green on fawn ground.
ENGLISH GLAZED COTTON
PRINT. *XVIII Century.*



Large floral design in many colours, chiefly blue.
ENGLISH CHINTZ. *Early XIX Century.*



PRINTED COTTON SCARF,
ITALIAN (MEZZARO).

Early XIX Century.

Whole design and enlarged portion. Probably made at San Pier d'Arena, a suburb of Genoa.
Light brown ground, floral pattern in red, blue, and purple.



JAPANESE STENCIL PATTERN.

XIX Century.



JAPANESE STENCIL PATTERNS.

XIX Century.

X

ECCLESIASTICAL VESTMENTS

THE best preserved medieval fabrics are those that are, or have been, in the possession of the Church, which from an early period of its history was the great patron of the more sumptuous products of the weaver's art; hence there are perhaps more written records in medieval times of ecclesiastical vestments, than of civic or domestic costumes.

A glossary is appended of the chief canonical vestments usually associated with the early ritual of the Church.

AMICE. — A rectangular piece of fine linen suspended over the shoulders of the clergy. The apparel is the embroidered part which was fastened to it to serve as a collar.

APPAREL. — Embroidered panels on the alb and the amice; on the alb they were usually four and sometimes six in number, of which the two smaller ones are on the sleeves just above the back of the



FIG. 48.—Church Vestments.

ECCLESIASTICAL VESTMENTS

hand. The other two at the bottom of the alb or skirt, one before and one behind.

ALB.—A garment which reached to the feet. It was usually made of pure white linen ; but other colours were used, and silk, velvet, and cloth of gold albs were worn in the Middle Ages.

CHASUBLE.—The upper or last vestment put on by the priest before celebrating the Mass. In form it is nearly circular, having an aperture in the middle for the head.

COPE.—A vestment like a cloak. Its form is an exact semi-circle without sleeves. It is fastened across the breast by a morse or clasp.

DALMATIC.—A vestment with wide sleeves. It has an aperture for the head. The garment is slit up a short distance on either side.

MANIPLE.—A narrow scarf fringed at each end of the richest materials, such as cloth of gold. It was worn depending from the left hand.

ORPHREYS.—Gold embroidered work—cloth of gold. The golden bands fastened to or embroidered on chasubles or copes. The orphreys were frequently used separately.

STOLE.—A narrow woven or embroidered scarf worn over the shoulders. In 1287 it was directed to be long enough to reach the bottom of the alb.

TUNICLE.—A short outer garment but with tight sleeves. The same shape as the dalmatic, but slightly longer and less ornamented.

The vestments of the Christian priesthood, both of the Greek and the Latin churches, have evolved from the secular dress of the later Roman empire. Thus the chasuble derives from the *penula*, *planeta*, or *casula*, a bell-shaped, sleeveless cloak, worn out of doors by persons of all classes. The cope was a cloak for wet weather (hence its alternative name, *pluvial*). The alb was an under-tunic, and the dalmatic an over-tunic. The two bands that run down the fronts of all except the Spanish dalmatics are the survivals of the old *clavi* latterly characterising the dress of all Roman citizens (the tunics found in Egyptian burying-grounds frequently have them). The maniple has developed out of a small cloth or handkerchief (*mappula*), dropped by consuls or prætors in starting races. There are certain differences between the vestments of the Latin and those of the Greek and other Oriental churches, the latter being as a rule ampler than the former. The maniple does not exist in the Greek church, its place being taken by the *epigonation*, a lozenge-shaped piece of cloth, which hangs down over the right knee.

RETROSPECT

IN a retrospective glance over the history of the weaving industry, especially in relation to pattern, the strong vitality, and remarkable persistency of certain early distinctive features of Eastern design and texture, are clearly seen through many historic periods.

Doubtless the remarkable continuity of traditional craftsmanship in China, India, and Persia, the early cultivation of silk and cotton by the inhabitants of these countries, and their skill in the weaving of splendid tissues of varying degrees of delicacy, ornamented by beautiful and significant patterning, necessarily exercised a controlling influence upon early European fabrics, by reason of the large importation of silk, cotton, and woven fabrics as articles of commerce; and also by reason of the fitness, beauty, and vitality of Eastern patterning. There is no doubt that the Eastern influence was also largely extended by the industrial and commercial activity of the Saracens, or Arabian craftsmen, and merchants throughout the Mediterranean littoral.

Possibly some of this continuity has necessarily resulted from the practical and universal conditions of the loom, which, as may be seen in the chapter devoted to this subject (page 11), had undergone various changes and developments which culminated in the Jacquard loom of 1804. It must be remembered, however, that the development of these appliances for weaving was only to simplify or expedite the process of weaving, and they did not produce anything more complex or more beautiful in pattern than before.

The silken fabrics of Byzantium of the 10th century (plates 11, 14), the Florentine velvets and brocades of the 15th century (plates 2, 38-41), the Indian and Persian brocades and the Chinese silks of the 17th-18th centuries (plates 15-20, and 26-29), all woven on the old draw-loom type, may be compared with the French Empire patterning (plates 71, 72), produced in 1810-13 on the Jacquard loom.

RETROSPECT

The Eastern influence retained much of its vitality and character in Italian and Flemish fabrics almost up to the 18th century, but in Lyons it was largely superseded by a more literal or naturalistic treatment of floral forms.

It is instructive to note the difference in the ideals of realism of the Eastern and Western craftsmen as expressed in the patterning of fabrics.

The Persian weaver (plate 29) gives a somewhat realistic interpretation of figures, mountains, trees, animals, and fishes, yet it is treated flatly, as pattern. In the Lyons example (frontispiece) realism is carried further by an attempt at modelling, and there is an endeavour made by floating the weft loosely, to get various qualities of textures, even at the cost of durability.

The realism of patterned fabrics was not confined to Lyons but was carried on contemporaneously at Spitalfields (plates 80-83), followed a little later by the printers of English chintzes (plates 99-101).

The weavers of this realistic period were undoubtedly highly skilled craftsmen, but it is questionable whether the result justified the expenditure of so much effort, when beauty and sumptuousness had been obtained by a more intelligent and artistic mode of enrichment, as shown in the magnificent productions of the Eastern looms, the significant patterning of the Sicilian silks and the Flemish linens, or the dignified, yet sumptuous, velvets of Florence.

It is not the purpose of this brief review to carry the story of Textile Design beyond the commencement of the 19th century, and yet it is impossible to close without pointing out that Decorative Design is a living art, and has always continued to evolve, even if occasionally on commonplace or bizarre lines.

As in the art of Music, some recent developments seem to be of a somewhat extreme type, yet these are a proof of vitality, and, even if objectionable in some ways, are preferable to a slavish copyism of the historic design of past centuries. The last few years have seen a fuller realisation of the possibilities of colour in pattern, though possibly this has been accompanied by the production of work in which form has been subordinated or even sacrificed to colour, and the design has not always been well balanced or proportioned. Nevertheless it is a fact that at the present time much fine and vigorous work of distinctive and original types is being accomplished in England.

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